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<tr>
<th>Acronym</th>
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<tbody>
<tr>
<td>ABET</td>
<td>Adult Basic Education and Training</td>
</tr>
<tr>
<td>ASGISA</td>
<td>Accelerated and Shared Growth Initiative for South Africa</td>
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<tr>
<td>BBEEE</td>
<td>Broad-Based Black Economic Empowerment</td>
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<tr>
<td>Biocapacity</td>
<td>The biological production capacity of a particular environment</td>
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<td>CAPE</td>
<td>Cape Action for People and the Environment</td>
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<td>CCSAP</td>
<td>Climate Change Strategy and Action Plan</td>
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<tr>
<td>CCT</td>
<td>City of Cape Town</td>
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<tr>
<td>CMAP</td>
<td>Chemical Management Action Plan</td>
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<tr>
<td>CMP</td>
<td>Coastal Management Programme</td>
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<tr>
<td>CO₂</td>
<td>Carbon dioxide</td>
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<td>DCS</td>
<td>Department of Community Safety</td>
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<td>DEA&amp;DP</td>
<td>Department of Environmental Affairs and Development Planning</td>
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<td>DEAT</td>
<td>Department of Environmental Affairs and Tourism (national)</td>
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<td>DECAS</td>
<td>Department of Cultural Affairs and Sport</td>
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<tr>
<td>DED&amp;T</td>
<td>Department of Economic Development and Tourism</td>
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<td>DoA</td>
<td>Department of Agriculture</td>
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<tr>
<td>DoE</td>
<td>Department of Education</td>
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<tr>
<td>DT&amp;PW</td>
<td>Department of Transport and Public Works</td>
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<tr>
<td>DWAF</td>
<td>Department of Water Affairs and Forestry</td>
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<tr>
<td>ECD</td>
<td>Early Childhood Development</td>
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<tr>
<td>Ecological Footprint</td>
<td>Biologically productive land and sea area needed to supply biological services and absorb wastes for a particular population</td>
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<tr>
<td>EIA</td>
<td>Environmental Impact Assessment</td>
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<td>EPWP</td>
<td>Extended Public Works Programme</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GRI</td>
<td>Global Reporting Initiative</td>
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<td>HCDS</td>
<td>Human Capital Development Strategy</td>
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<td>HDI</td>
<td>Human Development Index</td>
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<td>IDP</td>
<td>Integrated Development Plan</td>
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<td>iKapa GDS</td>
<td>The iKapa (or Provincial) Growth and Development Strategy</td>
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<td>ILRP</td>
<td>Integrated Law Reform Project</td>
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<td>IPCC</td>
<td>International Panel on Climate Change</td>
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<td>Isidima Strategy</td>
<td>Sustainable Human Settlements Strategy</td>
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<td>IWMP</td>
<td>Integrated Waste Management Plan</td>
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<td>LED</td>
<td>Local Economic Development</td>
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<td>MEDS</td>
<td>Micro-Economic Development Strategy</td>
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<td>NEMA</td>
<td>National Environmental Management Act</td>
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<td>NGO</td>
<td>Non-governmental Organisation</td>
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<td>PRS</td>
<td>Poverty Reduction Strategy</td>
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<td>PSDF</td>
<td>Provincial Spatial Development Framework</td>
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<td>RDP</td>
<td>Reconstruction and Development Programme</td>
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<td>REAF</td>
<td>Rural Economic Assistance Fund</td>
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<td>SANERI</td>
<td>South Africa’s National Energy Research Institute</td>
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<td>SAWEPE</td>
<td>South Africa Wind Energy Programme</td>
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<td>SCFS</td>
<td>Social Capital Formation Strategy</td>
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<td>SDF</td>
<td>Spatial Development Framework</td>
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<td>SDIP</td>
<td>Sustainable Development Implementation Project</td>
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<td>SDR</td>
<td>Sustainable Development Report</td>
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<td>SMMEs</td>
<td>Small, medium and micro-enterprises</td>
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<td>SPV</td>
<td>Special purpose vehicle</td>
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<td>SSS</td>
<td>Scarce Skills Strategy</td>
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<td>SWH</td>
<td>Solar Water Heater</td>
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<tr>
<td>TB</td>
<td>Tuberculosis</td>
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<tr>
<td>WCED</td>
<td>Western Cape Education Department</td>
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<tr>
<td>WCPSDF</td>
<td>Western Cape Provincial Spatial Development Framework</td>
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NOTE

Note: When referring to the institutions of the Provincial Government, we speak of ‘Province’; while ‘province’ refers to the geographic and political region. ‘We’ in the report refers to the Provincial Government of the Western Cape.
This is the first Sustainable Development Report issued by the Provincial Government of the Western Cape (“the Province”). This report reviews the sustainability performance of the Provincial Government, both in terms of carrying out its core policy and legislative functions (as framed largely by the iKapa Growth and Development Strategy), as well as in the nature of its internal organisational activities. Although the key role of municipalities in implementing the iKapa GDS and sustainability is acknowledged, this report does not provide a review of the sustainability approach and performance of municipalities. It is recognised that this is a significant gap, which will need to be addressed in future sustainable development reports.

The report also provides a broad perspective on the environmental and social status of the Western Cape as a geographic and economic region, as evaluated in terms of its Ecological Footprint and the United Nations Human Development Index.

The aim of this report is to provide a benchmark of where the Province is at with regard to sustainability and propose how the agenda could be advanced – both within the Provincial Government itself, and between the government and its stakeholders. This will inform the further development of policies to stimulate equitable and environmentally sustainable economic growth in the Western Cape. It must be recognised that, while positive change can be brought about through reducing the unsustainability of our strategies and operations, real change will only occur when we promote sustainability through re-inventing the way we do things.
The report describes why sustainability is vital for the Province’s long-term development, considers efforts to mainstream sustainability within the various Provincial Governmental departments, and provides a progress report on the Provincial Government’s sustainable development objectives and targets. This report differs from the State of Environment Report produced by the Province in 2005 in that it places sustainability, rather than the natural environment, at the core of planning. Rather than focusing on the state of the province and its ecosystems, the report focuses instead on reviewing the activities and performance of the Provincial Government departments, and examines what the Provincial Government is doing to promote sustainability through its policy activities and in the management of its own affairs.

The report has been published with reference to the Sustainability Reporting Guidelines and the Public Agency Sector Supplement of the Global Reporting Initiative (GRI)1. Using the GRI guidelines has helped to make the report more transparent and comparable. As this is the Province’s first sustainability report and many internal monitoring and reporting mechanisms are not yet fully in place, it has not been possible to provide full and accurate reporting against all of the GRI criteria. A statement on the Province’s reporting against each of the GRI criteria is available from the Provincial website: www.capegateway.gov.za.

The report was compiled through one-on-one, group and telephonic interviews with more than sixty staff in each of the Provincial Government departments. The interviews acted as two-way learning sessions and prompted healthy debate on the issue of sustainability and the responsibility for its implementation. The iKapa Growth and Development Strategy (GDS) and its underlying twelve sectoral strategies, departmental annual reports and annual performance plans, and the monitoring and evaluation system in the Office of the Premier provided valuable information for the report.

Once the report was compiled, it was shared with an external sustainability expert to provide objective comment. This is to further allow for open debate on how we are addressing our sustainability challenges.

The performance data and case studies provided throughout the report relate to the period from the beginning of 2007 to the end of 2008. In order to inspire all to consider what sustainability means and how it can be integrated into the Provincial functions, the case studies are purposefully focused on positive examples of where sustainability principles have been implemented. The commentary boxes through the report as well as the introductory and summary sections provide critique on how the Province could improve its sustainability performance. It should be noted that the iKapa GDS was only published as a White Paper in February 2008, and its real impact will only become apparent during the April 2008 – March 2009 financial year. It is noted, however, that the iKapa GDS will need to be evaluated in terms of its adequacy in addressing principles of sustainability and that alignment between the iKapa GDS and departmental policies and strategies should be considered when reporting on sustainability. Similarly, the National Framework for Sustainable Development was only released in July 2008, with its impacts likely to be realised in the 2009/2010 financial year.

How to read this report

THE REPORT COMPRISSES FIVE MAIN SECTIONS:

- **Sustainable Development and the Western Cape Provincial Government** – Introduces the Western Cape Province and the Provincial Government, and explains how ‘sustainable development’ is understood by the Province.

- **Progress Report 1: Environmental and social sustainability of the Western Cape Province** – Provides a broad overview of the environmental and social status of the Western Cape as a geographic and economic region, as evaluated in terms of its Ecological Footprint and the Human Development Index.

- **Progress Report 2: Integrating sustainability in Provincial policy** – Reviews the extent to which sustainability principles have been integrated into the Province’s core functions as government, through the implementation of its policy and legislative activities.

- **Progress Report 3: Implementing sustainability in our internal operations** – Reviews the sustainability performance of the Province as an organisation: as the employer of more than 75 000 people, the owner of land and buildings, the manager of a fleet of vehicles, and a significant purchaser of goods and services.

- **The road ahead** – Outlines some of the implications arising from the reporting process and includes some commitments for future reporting processes.

To close, an external comment on the report is provided by Saliem Fakir, Head of Living Planet Unit, WWF-South Africa.
Message from the Minister for Local Government, Environmental Affairs and Development Planning

It gives me pleasure to introduce the first annual Sustainable Development Report for the Provincial Government of the Western Cape. While a number of leading South African companies have been producing such reports for a while now, we are proud to be producing one of the first such sustainability reports by government in this country.

Promoting “sustainable development” – development that meets the needs of the current generation without compromising the ability of future generations to meet their own needs – forms a cornerstone of the policies and programmes of the Western Cape Provincial Government. It is embedded in the aims and objectives of the over-arching iKapa Provincial Growth and Development Strategy.

Our commitment to sustainability is further clarified in our Sustainable Development Implementation Plan (SDIP), an important step towards mainstreaming the principles of sustainable development within the policies, strategies, programmes and projects of the Western Cape Provincial Government. Our vision for sustainable development is stated in the SDIP as follows:

For the Western Cape Province, sustainable development will be achieved through implementing integrated governance systems that promote economic growth in a manner that contributes to greater social equity and that maintains the ongoing capacity of the natural environment to provide the ecological goods and services upon which socio-economic development depends.
Recognising that accountability and transparency are important principles that underpin sustainability, we at the Provincial Department of Environmental Affairs and Development Planning undertook to produce this Sustainable Development Report with the aim of reporting publicly on the extent to which the principles of sustainability have been incorporated into the Provincial Government as a whole. The report includes a review of the status of the province as a geographic area (through the Ecological Footprint and the Human Development Indicators), and assesses the extent to which the principles of sustainability have been integrated into both the core functions and internal operations of the various provincial departments.

The report is intended to openly communicate progress on the Provincial Government’s sustainable development objectives and targets and encourages dialogue with external stakeholders and within the Provincial Government. While we would like to let others know of our success stories so that they may learn from them, we also seek to be open about the challenges we face and the areas of our work that require improvement.

In the overall context of implementing sustainability, we recognise that we still have some way to go. While we believe that the work we have done so far – and the guidance provided in the iKapa Growth and Development Strategy – represents an important start, we acknowledge that we have some very daunting challenges ahead: declining human development indices, an enormous housing backlog, persistent economic inequality, a particularly energy- and carbon-intensive economic profile, and, within the Provincial Government itself, concerns relating to staff capacity and turnover. Recognising these challenges, we recommit ourselves to finding the means to address them.

These challenges are not unique to the Western Cape, but are experienced around the world. We will not be able to solve them on our own. It is only by laying our cards on the table that we can begin to engage with others to find solutions to our sustainability challenges – we need to break down barriers between departments in the Provincial Government, between the different spheres of government, and between government and other stakeholders.

As we come to understand the problems we face more deeply, so we need to inform the public, for their support is vital to any meaningful programme of developmental transformation.

Our biggest challenge is to understand that sustainable development is not an additional function for us to perform. Instead, it pertains to how we perform our functions. To this end, this report focuses on initiatives being undertaken by various Provincial departments that have underlying elements of sustainability. Many of our initiatives may be biased towards either the economic, social or environmental angle – by pulling these initiatives into one report, we begin to join the dots and illustrate how all our initiatives need to consider other elements of sustainability to be truly sustainable.

We are driving a number of successful sustainability-related initiatives, but as this report illustrates, there is an urgent need for clear co-ordination of and accountability for sustainability within Provincial Government to ensure that sustainability is systematically integrated into all the work that we do.

I encourage you – our stakeholders – to read this report and to provide us with full and frank feedback on our performance, and with suggestions on how we may further improve our performance.
Our accomplishments and challenges

We have already taken important steps towards embedding the principle of sustainable development into the management of the province’s development. This section provides a snapshot of some of our achievements as well as some of the most pressing challenges with regard to sustainable development. All of these points are considered in more detail in subsequent sections.

**WHAT WE’VE ALREADY ACHIEVED**

- Embedding the principles of sustainability into the iKapa Growth and Development Strategy’s vision 2014.
- Developing the Provincial Spatial Development Framework, which incorporates the principles of sustainability, to guide and align decision making across the province.
- Providing business advice and support to 12 100 SMMEs throughout the province in 2007/08, through the RED Door programme.
- Increasing agricultural exports from the Western Cape fourfold in the ten-year period from 1997 to 2006.
- Providing 16 093 housing units and 18 064 serviced sites in 2007/08.
- Launching Isidima – the Western Cape Sustainable Human Settlement Strategy – in June 2007, laying out how we will deliver on our promise of creating ‘a home for all in the Western Cape’.
- Establishing the cross departmental Built Environment Support Programme to support select municipalities to further develop their spatial development frameworks and human settlement plans.
- Establishing the Development Facilitation Unit to facilitate a more proactive and strategic approach to EIAs and to assist with the identification of barriers, constraints and challenges to achieving sustainable development and service delivery.
- Implementing the Khanya Project, which uses technology to address the increasing shortage of educator capacity in schools, has resulted in more than 38 000 computers being used across 974 schools, benefiting 22 500 educators and 755 000 learners.
- Developing and rolling out a Provincial Climate Change Strategy and Action Plan.
- Developing a Provincial Sustainable Energy Strategy and running a pilot project installing 1000 solar water heaters in houses across the Western Cape.
- Stimulating the recycling economy, with a focus on securing the supply of recyclables, while promoting the market for recycled products.
- Running the Stewardship Programme, resulting in 74 533 ha of private farm land being conserved, promoting good biodiversity management practices and social upliftment in the areas concerned.
- Producing guidelines and working with developers and EIA practitioners to assist them in developing more appropriate EIAs that fully consider alternatives.
- Developing and commencing implementation of a Provincial Public Transport Improvement Plan.
- Addressing provincial and household food security through the expansion of food gardens and the provision of school nutrition programmes.

**REMAINING CHALLENGES TO ADDRESS**

Below follows a selection of the challenges we need to address:

- Radically rethinking the way we do business and identifying how we can positively influence the same scale of change beyond our own operations.
- Assigning clear accountabilities for co-ordinating, implementing and monitoring sustainability across all Provincial departments and local government bodies.
- Changing mindsets and capacitating ourselves to regard sustainability not as additional work, but rather as being the basis of how we do our work.
- Removing the silo-mindset that permeates many of our departments.
- Understanding and putting into practice how we can uplift the quality of life of the poor within the province’s ecological limits.
- Redressing capacity constraints across all departments.
- Ensuring sufficient resources (financial, human and technical) for embedding sustainability throughout the Province.
5.23 million people
Most of this population is concentrated around Cape Town in the far south-west

Bands of mountains separate the winter rainfall coastal regions from the semi-arid Karoo interior

Most of the province’s people are Afrikaans speakers
Xhosa speakers being the fastest growing language group, largely due to immigration

Surface area: 130 000 km²

The province extends five hundred kilometres east along the southernmost coast of Africa, and four hundred kilometres north along the west coast of South Africa

Western Cape

Cape Town
Beaufort West
Mossel Bay
Knysna
George

Atlantic Ocean
Indian Ocean
CHAPTER 1

Sustainable Development and the Western Cape Provincial Government

1.1. Introducing the Western Cape Province

The Western Cape Provincial Government (hereafter referred to as ‘Province’) is responsible for the administration and development of the Western Cape Province, one of the nine provinces of South Africa established following the democratic transition in 1994.

The Western Cape is South Africa’s second-largest province, with a surface area of 130,000 km² approximately the same as Greece. In 2007, it had a population of 5.23 million people. Our population is growing strongly, largely due to immigration.

From the capital city, Cape Town, the province extends five hundred kilometres east along the southernmost coast of Africa, and four hundred kilometres north along the west coast of South Africa. Bands of mountains run along each of these dimensions, separating the winter rainfall coastal regions from the semi-arid Karoo interior. Most of the province’s population is concentrated around Cape Town in the far southwest. This corner is also the most fertile region of the province with the best soils and highest rainfall. The largest towns besides greater Cape Town are Mossel Bay, George and Knysna (on the south coast), Beaufort West (in the Karoo), and Saldanha-Vredenburg on the west coast.

The province’s history of colonialism and enforced racial segregation prior to 1994 has created a population with deep social divisions, which persist in the form of high levels of poverty, economic inequality, informal housing and poor living conditions. Most of the province’s people are Afrikaans speakers. Others speak English and Xhosa, with Xhosa speakers being the fastest growing language group, largely due to immigration. The Western Cape’s contribution to national GDP is the third largest amongst the provinces, after Gauteng and KwaZulu-Natal.

The above provides an introduction to the sustainability-related challenges that the province faces: the need to protect and enhance our natural resources while promoting economic growth and improving living conditions and reducing inequality among the province’s population.

1.2. The Western Cape Provincial Government

In terms of the South African Constitution, the provincial and national legislatures have concurrent competence over areas including education (other than tertiary), indigenous forests, agriculture, environment, health, industrial promotion, population development, housing, public transport and regional, urban and rural development.

Provincial responsibilities overlap with local government responsibilities in, amongst others, the following areas: potable water supplies and domestic waste-water and sewage disposal; municipal planning; health services; transport and public works. The Provincial Government is also responsible for intervening in local government where the relevant authorities are deemed to be failing.

The provincial executive has powers to administer and execute provincial and national legislation to the extent that it is administratively competent to do so. The Province’s power is limited by the Constitutional requirements in that it may not pass legislation that is detrimental to the movement of people and goods between provinces.

The provincial council of no less than five and no more than ten ministers is headed by the premier, and leads the 12 provincial departments (see page 12).

1.3. The iKapa Growth and Development Strategy

Policy in the Western Cape is guided by the goals and objectives of the iKapa Growth and Development Strategy (‘iKapa GDS’), which aims to make the Western Cape ‘A Home for All’. It seeks to build this home by shifting development towards a future of shared growth and integrated sustainable development. While the Provincial Government of the Western Cape leads this process, its success depends on a strong partnership with local government, labour, civil society and business.

‘... WITH A SURFACE AREA OF 130 000 KM², APPROXIMATELY THE SAME AS GREECE. IN 2007, IT HAD A POPULATION OF 5.23 MILLION PEOPLE.’
The iKapa GDS commits to the following five long-term goals and nine objectives to guide policy-making and resource allocation in the Province:

**GOAL I GROW AND SHARE THE ECONOMY**
- Objective 1: Broaden economic participation and reduce poverty
- Objective 2: Stimulate efficient and effective infrastructure

**GOAL II BUILD A MORE EQUAL AND CARING SOCIETY WHERE POVERTY IS ERADICATED**
- Objective 3: Promote liveable and caring communities
- Objective 4: Improve resilience and tolerance within and between communities
- Objective 5: Enhance human capacity

**GOAL III PROMOTE ECOLOGICALLY SUSTAINABLE DEVELOPMENT**
- Objective 6: Enhance sustainable resource use

**GOAL IV FOSTER GREATER SPATIAL INTEGRATION [AND IMPROVED TRANSPORTATION]**
- Objective 7: Ensure greater spatial integration
- Objective 8: Develop an effective public and non-motorised transport system

**GOAL V ENSURING EFFECTIVE GOVERNANCE AND INSTITUTIONAL STRENGTHENING**
- Objective 9: Build effective governance institutions

The iKapa GDS objectives:
- to translate national imperatives – such as the Constitution, the National Spatial Development Perspective, Vision 2014, the Millennium Development Goals, the Medium-term Strategic Framework, the Accelerated and Shared Growth Initiative for South Africa (AGISA), the National Industrial Policy Framework, the National Framework for Local Economic Development, the National Framework for Sustainable Development and the anti-poverty strategy – into the context of the Western Cape;

**THE PRINCIPLES OF SUSTAINABILITY ARE EMBEDDED IN THE CORE OF THE IKAPA GDS VISION FOR 2014:**

By 2014 the Western Cape will be a sustainable ‘Home for All’ its citizens, whether rich or poor, boy or girl, regardless of mother tongue, race or creed and whether living in the countryside, in a suburb, township or informal settlement. The Western Cape will be an empowering place to live with improved opportunities though shared growth and integrated development. All Western Cape residents will enjoy a quality of life characterised by greater levels of equality, improved access to economic and social opportunities, assets and resources and healthy living environments that foster wellbeing. Wider economic participation will fuel a higher than average rate of growth and the natural resource base – including the vital ecosystems of air, water, land and biodiversity – will be enhanced and supported by iKapa Elihlumayo.
to guide municipal integrated development plans, local economic development (LED) strategies and district and metropolitan growth and development strategies;

- to guide intergovernmental engagements as prescribed by the Intergovernmental Relations Framework Act 13 of 2005;

- to inform the strategic plans and investment priorities of the provincial departments, national departments and state-owned enterprises operating in the Western Cape;

- to inform non-government stakeholders – such as the business sector, special-purpose vehicles, civil society, labour and the higher-education sectors – operating in the Western Cape of its growth intentions; and

- to provide social partners with clear signals about desired growth and development objectives, priorities and outcomes; and to redress the spatial and socio-economic legacy of apartheid.

The iKapa GDS builds on the following 12 iKapa sectoral strategies that have been developed by the Western Cape’s line departments:

1. **The Provincial Spatial Development Framework (PSDF):** Identifies the areas of growth in the Province, and provides a framework of where and how future growth can be sustainable.

2. **Strategic Infrastructure Plan (SIP):** Indicates what infrastructure – roads, water, ICT, energy, sanitation – is needed, and when it can be built.

3. **Sustainable Human Settlements Strategy (Isidima):** Within the PSDF, this strategy sets out options to solve the housing backlog, including upgrading informal settlements, creating more affordable housing, the assurance of sustainable construction methods, making communities safer and more comfortable and reducing the cost of energy. It also sets out the importance of residential accommodation close to public transport, shops, work opportunities and places of relaxation.

4. **Micro-economic Development Strategy (MEDS):** Recommends a range of public-sector interventions to stimulate specific high-potential sectors – including tourism, business-process outsourcing and the servicing of the oil and gas industry – and the support these interventions need.

5. **Poverty Reduction Strategy (PRS):** This strategy aims to reduce poverty through interventions such as job creation; access to grants and health-and-education benefits; and programmes to address the greater vulnerability of all poor people, especially women, and those suffering from TB and HIV/AIDS.

6. **Human Capital Development Strategy (HCDS):** This strategy emphasises retaining scarce skills and promotion of quality education to expand the skills base and increase job creation.

7. **Scarce Skills Strategy (SSS):** Identifies skills shortages and corresponding strategies to attract and retain individuals within these categories and to encourage young people to study in those areas.

8. **Social Capital Formation Strategy (SCFS):** This strategy examines issues such as migration patterns and indicates the manner in which the province’s population is changing. It addresses the challenges of violence and crime in communities and the need to build social cohesion within and across communities to make the Western Cape ‘A Home for All’.

9. **Burden of Disease and Health Care 2010 (BDHC2010):** Outlines how the Province can support a healthy and capable population, and a responsive medical service prioritising primary-health care.

10. **Integrated Law Reform Project (ILRP):** This project aims to bring together the different laws that govern planning and environmental and heritage impact assessments, to streamline the sustainable development of land or setting up of businesses.

11. **Sustainable Development Implementation Plan (SDIP):** This plan includes programmes to encourage biodiversity, effective open-space management and the better management of settlements by ensuring the sustainability of services in respect of water, waste, energy and land.

12. **Climate Change Response Strategy (CCRS):** This strategy outlines the approach to both mitigating climate change – reducing greenhouse gas emissions through the saving of energy, the use of public transport, clean production methods, the promotion of renewable energy and clean technology – and adapting to climate change – considering issues such as land use planning, alternative agricultural production, flood attenuation and water efficient practices.

In Section three of this report, we review our progress in integrating and implementing the principles of sustainability within each of the above goals and objectives, as well as our progress in implementing key elements of the Provincial Sustainable Development Implementation Plan. We have sought as far as possible to align with the indicators in the monitoring and evaluation work on the iKapa GDS that is currently being undertaken by the Office of the Premier. There have been some challenges in that certain indicators for the iKapa GDS are under development and significant data, particularly relating to environmental performance, have yet to be internally collated.
1.4. Departmental overviews

A key challenge within the Provincial Government is to ensure that each of the twelve Provincial departments work together on key strategies and initiatives, delivering seamless service in the most effective manner. While the sustainability agenda may need to be driven by one of the departments, all departments have a role to play in implementing sustainability into their core functions and how they perform these.

The department works to promote safety and security through a process of civilian oversight, integrated crime prevention strategies, effective traffic law enforcement, traffic safety education and security risk management.

In order to inspire more people to engage actively in sport and cultural activities as participants, spectators and supporters, the department is focused strongly on supporting school sport and football development, arts, culture and language linked to the 2010 World Cup. It also supports libraries, archives, museums, arts, culture and heritage programmes and initiatives and multilingualism. In terms of sustainability, the department is responsible for encouraging citizens to live a healthy lifestyle and to maintain and develop their cultural heritage.

The department supports the economy through the implementation of programmes focused on integrated economic development services, trade and industry development, and business regulation and governance. Support is largely focused on key sectors of the economy. In terms of sustainability, the department would need to ensure that the right type of economic growth is supported – i.e. growth that is sustainable in environmental and social terms as well as in economic terms. The department also has a key role to play in the development of industries such as those related to renewable energy, energy efficient products, and recycling.

Further detail on the functions and activities of each department is available in the departmental annual performance plans and annual reports.
| Department of Education | The department works to ensure that all learners acquire the knowledge, skills and values they need to realise their potential, lead fulfilling lives, contribute to social and economic development, participate fully in the life of the country, compete internationally, and build communities capable of managing their lives successfully and with dignity. The provincial Human Capital Development Strategy aims to improve the conditions and quality of education, and of the educational environment, and to expand the skills and qualifications base. The department has a role to play in including the five capitals of sustainability in school curricula. |
| Department of Environmental Affairs and Development Planning | The core functions and responsibilities of the department are to promote sustainable development, pollution and solid waste management, protection of biodiversity, provincial, regional and local spatial planning, associated environmental and land development management, coastal management and compliance monitoring and law enforcement. |
| Department of Health | The department is responsible for providing health services to the uninsured population of the province, which is 73% of the total population of 5.2 million (3.6 million). This is done through administering health services across the province and providing district health services, emergency medical services, provincial hospital services, central hospital services, health sciences training support, health care support services and health facilities management. |
| Department of Local Government and Housing | The department works to enhance the capacity of municipalities to deliver services, especially to the poor, and to create human settlements that promote social, economic and spatial sustainability and integration. The department is accelerating service delivery, strengthening local government and public participation, while ensuring good governance and is guided by the Isidima strategy and the Five Year Strategic Agenda for Local Government. In terms of sustainability, environmental sustainability will need to be further considered in the provision of housing. |
| The Department of Social Development | The department is mandated to protect, care and support the most vulnerable members of our communities, especially children, persons with disabilities, older persons and the poverty stricken, while also focusing on developing youth and strengthening the family. In terms of sustainability, the department is responsible for providing social development in a manner that reduces inequalities in society. |
| Department of Transport and Public Works | Public Works is responsible for physically accommodating all provincial departments and for providing supporting professional and technical services. The department is also responsible for roads infrastructure, co-ordinating public transport, traffic management and implementing community-based programmes such as the Expanded Public Works Programme. In terms of sustainability, the department is responsible for ensuring that the provision of transport infrastructure encourages the use of public transport, minimises the negative environmental and social impacts of transport and integrates with the provision of housing and other services to minimise the need of people to travel long distances. |
| Provincial Treasury | Provincial Treasury’s role is to systematically try to improve social and economic equity – which could extend to all elements of sustainability – in the province via their role in financial resource allocation, guidance of expenditures and promotion of better financial management in both the provincial and municipal spheres. |
“FOR THE WESTERN CAPE, SUSTAINABLE DEVELOPMENT DEMANDS THAT WE PURSUE GROWTH STRATEGIES THAT ADDRESS THE NEEDS OF THE PROVINCE’S PEOPLE FOR EMPLOYMENT, HEALTH, EDUCATION AND THE ERADICATION OF POVERTY.”

1.5. What is sustainable development?

Our understanding of sustainable development is informed by the South African National Framework for Sustainable Development, and by the provisions of the Western Cape’s Sustainable Development Implementation Plan. Both these documents underline the need to fully integrate social, economic and environmental factors into planning, implementation and decision-making, so as to ensure that development serves both present and future generations.

For the Western Cape, sustainable development demands that we pursue growth strategies that address the needs of the province’s people for employment, health, education and the eradication of poverty – all supporting human development – while at the same time respecting the limits of our ecosystems. While valuable progress has been made – both nationally and globally – in promoting human welfare and development, there are still significant challenges associated with overcoming persistent poverty and social inequality. At the same time, we now know that in promoting economic development we can no longer afford to live as if the ‘services’ provided by the environment come without a cost. Resource degradation also raises severe equity concerns. If high economic growth is pursued at the cost of our natural capital stock, it is the poor who will suffer first. For instance, should water tables sink, the cost of the technology and energy needed to access the groundwater rises. As extraction costs rise, the poor would be the first to suffer water losses.

Sustainable development recognises that we need to account for more than the financial costs provided for in traditional economics. Instead, life cycle costing – considering the social, environmental and financial costs – of all our operations needs to become the norm to ensure that we don’t lose the base on which our economies depend. Sustainable development demands not just technical advances in reducing the impacts of the way we live; it also demands an unprecedented shift in values that allows for greater socio-economic equality within the context of depleting natural resources.

Human history shows that even the most successful cultures are prone to collapse or decline. If we do not find the courage to make difficult decisions and resist special interests, and adopt the path of sustainable development, then decline is an inevitable outcome. There are unambiguous warning signs – climate change, soaring food and energy costs, social disruption, and declining fisheries and forests – that suggest that such decline is imminent if not already upon us.

There is no rational alternative for us but to promote sustainable development.

1.5.1. Understanding sustainable development: The five capitals model

A useful way to conceptualise the practical and policy implications of sustainable development for the Western Cape, is to view it in terms of the economic concepts of capital and income. In terms of this approach the maximum income for a given society can be defined as the level of consumption that can occur without depleting that society’s capital. It is suggested that the goods and services needed to improve the quality of our lives are derived from five types of capital assets:

- **Natural Capital** – renewable resources (such as freshwater, fisheries, wood and non-processed food), non-renewable resources (such as mineral deposits), sinks (that absorb, neutralise or recycle wastes) and ecological processes such as climate and disease regulation.

- **Human Capital** – people’s health, knowledge, skills, motivation and capacity for relationships, all essential for productive work and the creation of a better quality of life (includes what is also often referred to as “intellectual capital”).

- **Social Capital** – the institutions that help us maintain and develop human capital in partnership with others, such as families, communities, businesses, trade unions, schools and voluntary organisations.

- **Manufactured Capital** – material goods or fixed assets that contribute to the production process or the provision of services rather than the output itself; for example tools, machinery, buildings and infrastructure.

- **Financial Capital** – enables the other types of capital to be owned and traded, but has no intrinsic value itself; it is representative of natural, human, social or manufactured capital, and includes shares, bonds and banknotes.
An underlying principle of sustainable development is the recognition of the relationship and dependencies between these capital stocks (graphically illustrated in Figure 1). Manufactured and financial capital stocks are products of, and dependent on, human and social capital, which in turn are products of and dependent on natural capital.

Sustainable development depends upon maintaining and, where possible, increasing stocks of these capital assets so that we can succeed in living off the income without depleting the capital. Crucially, all capital stocks are ultimately dependent upon maintaining a critical minimum stock of natural capital. This has significant policy implications for current economic development patterns, which are generally characterised by a transformation of natural capital – through the institutions, networks and efforts of social and human capital – into financial and manufactured capital.

The governance system of the country and province provides the regulatory framework within which the other systems and forms of capital are required to operate. Furthermore, the governance system highlights the importance of institutions in implementing the concept of sustainable development and in providing an oversight function.

The below model illustrates an interdependent model of sustainability, which is a shift away from the previous interactive model of sustainability (with the three connecting circles). In the interdependent model, it becomes clear that the natural resource base provides the basis upon which the social and economic systems operate. The quality of the natural resource base will therefore determine the quality of the other systems.

This approach to sustainable development informs the policy recommendations reflected in South Africa’s National Framework for Sustainable Development (NFSD). In defining sustainable development, the NFSD states that:

In South Africa, as in the rest of the world, the situation of continuing inequality, accompanied by a deteriorating resource base, makes it imperative for us to go beyond thinking in terms of trade-offs and the simplicity of the ‘triple bottom line’. We must acknowledge and emphasise that there are non-negotiable ecological thresholds; that we need to maintain our stock of natural capital over time; and that we must employ the precautionary principle in this approach. We must accept that social, economic and ecosystem factors are embedded within each other, and are underpinned by our systems of governance.7

This understanding of sustainable development is illustrated in Figure 1.

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**Figure 1. Sustainable development: The Five Capitals Model**
1.5.2. The crisis of sustainability

The present crisis of sustainability arises from the fact that our current production and consumption patterns are depleting stocks of natural capital – and some aspects of human and social capital – largely because we fail to assign sufficient value to these capital stocks in our decision-making processes. All societies have some concept of what is acceptable and what is unacceptable for the good of society in terms of consumption and production patterns – this perception does not, however, necessarily favour the conservation of natural capital stocks. Decision making depends on the value that is placed on different outcomes, with this value being determined by a society’s values, politics and economics.

If this value is not factored into how society develops, the long-term implications are enormous, as is demonstrated by the encroaching crises of climate change (in turn affecting food production and disease burden) and water scarcity. Rates of consumption must be reduced, and made more equitable if we are to avoid seeing a long-term decline in the quality of life of the poor majority. Helping the poorest citizens improve their lives is not just important for them but essential in creating social stability, which is always eroded by inequality. In a country such as South Africa, we face the challenge of needing to grow and develop to improve the quality of lives, but without eroding out natural and social capital stocks. To achieve this, we need to decouple development and consumption, which can only be achieved through a fundamental change in how we do things.

“THE LOSS OF SERVICES DERIVED FROM ECOSYSTEMS IS A SIGNIFICANT BARRIER TO THE ACHIEVEMENT OF THE MILLENNIUM DEVELOPMENT GOALS TO REDUCE POVERTY, HUNGER, AND DISEASE.”

– MILLENNIUM ECOSYSTEM ASSESSMENT BOARD, 2005

1.5.3. Guiding principles for decision makers

Recognising the implications of this approach to sustainable development, the Western Cape’s Sustainable Development Implementation Plan (SDIP) commits to various guiding principles for sustainable development in the province, including:

- mainstreaming sustainable development into all policy, planning and decision-making processes. This will include creating objectives, based on the principles below, against which all departments are measured;

- ensuring that economic growth remains within the ecological limits of the province’s natural resource base; this is not just about minimising negative impacts, but about promoting positive impacts, i.e. productive investment in sustainable industries. This will include the promotion of developments that:
  - are less resource intensive – developments that create employment opportunities but are resource intensive, will increase inequality and exacerbate segregation of societies and do not constitute sustainable development;
  - implement technologies to optimise resource efficiency, or reduce resource dependency;
  - are focused in priority areas (NSDP and PSDF);
  - address poverty as well as inequality;
  - address segregation of communities; and,
  - are consistent with the vision and objectives for a specific community as reflected in, among other, the IDPs and SDFs.

- facilitating co-operative governance across all spheres of government;

- linking and enhancing synergies between social justice, secure livelihoods, economic prosperity, community well-being, and environmental integrity (for example in ensuring provincial and household food security) – which will be supported through co-operative governance as outlined above;

- building appropriate regulatory and institutional systems for supporting sustainable development, which ensure that organisations are accountable for their resource use;

- ensuring efficient resource use through an effective mix of regulatory and market-based policy instruments;

- applying the precautionary principle in our decision-making;

- promoting the participation of all interested and affected parties in governance, to the extent that all citizens are aware of and are empowered to take shared responsibility for ensuring and promoting sustainable development;

- developing monitoring and evaluation systems to measure the success or failure of governance.

In this report, we review the extent to which the Province has in fact managed to implement these important principles, and invite our stakeholders to hold us to account on how we are responding to the challenges of sustainability.
CHAPTER 2

PROGRESS REPORT 1 – Environmental and social sustainability of the Western Cape Province

At present, the Western Cape’s developmental profile combines medium level – and in some respects declining – human development, with increasing and unsustainable demands on our environment. In this section of the report we assess environmental and social sustainability at a broad level for the province.

To assess the province’s environmental status – and its consequent effect on the economy and society - we have used the concept of the Ecological Footprint. The Ecological Footprint concept is an attempt to measure our total consumption and the demands it places on our environment in terms of the natural resources needed to support that consumption. We outline the data that describes the Ecological Footprint for the Western Cape, explain how it was derived, and briefly analyse some of its implications.

In reviewing the Western Cape’s social sustainability we use the standard measure of human well-being established by the UN Development Programme – namely the Human Development Index (HDI) – that provides a broad overview of issues such as life expectancy, education and income.

The Ecological Footprint and Human Development Indicators are frequently but not necessarily interlinked. Stresses on the environment, which are measured in the Ecological Footprint, can in some circumstances compromise human development. An example would be the effects on local communities of soil erosion, pollution and declining natural...
CHAPTER 2

SUSTAINABLE DEVELOPMENT REPORT 2008

Box 1 URGENT SUSTAINABILITY CHALLENGES FOR THE WESTERN CAPE IDENTIFIED THROUGH THE ECOLOGICAL FOOTPRINT AND HDI ANALYSES

- The Western Cape’s demand on land is three and a half times the size of the province itself.
- If everyone on Earth lived like the wealthiest 10% of the Western Province’s population, we’d need nearly five and a half Earths to support us all.
- Ninety percent of the Western Province’s population is living beyond one planet lifestyle. The 10% who live a one planet lifestyle are living in conditions of extreme poverty, which is not socially sustainable.
- The Department of Water Affairs and Forestry expects demand for water in the Western Cape to exceed supply by 2030; some experts say this could happen as soon as 2025.
- The current housing backlog for the Western Cape is 410,000 units, growing to 804,000 by 2040 if the current delivery rate remains constant.
- R1.5 billion was budgeted for water and sanitation infrastructure spending by local government, but an estimated R10 billion is needed to eradicate backlogs by 2014.
- By 2050, rainfall in the Western Cape may have decreased by 30% due to climate change.

goods like fish and forests. The HDI measures quality of life, but does not factor in whether or not that quality of life is sustainable. A community can have a high HDI which comes at considerable cost to the environment but not to the community’s immediate environment, as trade and transport make it possible to keep Ecological Footprint at “arms length”. A developed country lifestyle is often founded on a very large Ecological Footprint, which in turn reduces the HDI of people in other places or countries. The relationship between the two indicators is not simple, but in almost all instances a high HDI comes with a large price tag – or Ecological Footprint – attached.

2.1. The Western Cape: Environmental sustainability

There are a number of risks to the natural environment, and consequently to society, that are caused by unsustainable development: depletion of resources such as fish stocks, degradation of soil and water supplies, destruction of wild habitat and loss of biodiversity, and human-induced climate change.

While not the only environmental challenge, climate change certainly presents the potentially most serious threat to human well-being and prosperity. The national government’s recently released Long Term Mitigation Scenario argues that climate change in South Africa is already having a mostly negative impact on people and ecosystems. The economic case for action is compelling. The costs of emissions reductions are high, but the costs of inaction will be far higher, because climate impacts require large-scale adaptation. This is not just an environmental issue. It goes to the very heart of the world’s future economic viability and on efforts to eradicate poverty, including achieving and sustaining the Millennium Development Goals. South Africans, and particularly our poor communities, are especially vulnerable to many of the projected future climate impacts.

2.1.1. The One Planet Challenge

A useful means for assessing the sustainability of a particular area – and for visualising the idea of ecological limits – is through the concept of the Ecological Footprint, an approach that we have applied to assess the current environmental state of the Western Cape Province.

Using the common unit of land area, Ecological Footprints represent a measure of the extent to which a particular community – be it an individual organisation, town, region, country, or the planet – is moving towards sustainable development, by comparing that community’s demand for natural resources – in terms of consumption - with the (finite) amount of resources available to it. Measured in global hectares per capita, the Ecological Footprint of a particular community refers to the total area of biologically productive cropland, grazing land, forest and fishing grounds needed to produce the resources that community needs to sustain itself, absorb its wastes, and to provide space for its infrastructure.

To assess the sustainability of a particular community, the Ecological Footprint of that community should be compared with the amount of biocapacity available within that community’s own borders. Biocapacity is nature’s ability to produce services such as forests, fresh water, cropland, the replenishment of oxygen and absorption of CO2 in the atmosphere, and the decomposition of

“WHILE NOT THE ONLY ENVIRONMENTAL CHALLENGE, CLIMATE CHANGE CERTAINLY PRESENTS THE POTENTIALLY MOST SERIOUS THREAT TO HUMAN WELL-BEING AND PROSPERITY.”
waste. If a community’s Footprint is greater than its bio-capacity, then it is living in ‘ecological debt’. To operate its economy in such conditions, ecological debtors will need to either import resources from elsewhere in the world – for example by using the global commons, such as the atmosphere and the oceans, as a sink for its emissions – or they will be forced to liquidate their domestic ecological assets, for example by drawing down stocks in forests and fisheries by over-harvesting. By living beyond its means, such communities are liquidating the assets on which human well-being depends. This not only undermines the development rights of future generations, but also contributes to increasing social tensions and potential conflict within current generations.

In 2005 the global Ecological Footprint was estimated at 17.5 billion global hectares (gha), or 2.7 gha per person. On the supply side, the total productive area (or ‘bio-capacity’) was estimated at 13.6 billion gha, or 2.1 gha per person. In other words, at a global level humanity’s footprint has overshot the Earth’s total bio-capacity and we are now living in a state of ecological debt at a planetary level, with global demands on the environment exceeding supply by 30%. It has been estimated that we first started living in debt in the 1980s, and that this ecological overshoot has been increasing since then.

It may seem paradoxical that we can have an Ecological Footprint, or Ecological Demand, that exceeds biocapacity. But our excessive demands on the environment are visible in areas such as global warming as a consequence of excessive fossil fuel use, the pollution of rivers, diminishing biodiversity, shrinking forests and fisheries, and a declining rather than constant quality of life for human beings.

Using this approach, Table 1 and Figure 2 provide an overview of ‘ecological debtor’ and ‘creditor’ countries globally.

Table 1. Ecological debtor and creditor countries

<table>
<thead>
<tr>
<th>COUNTRY (Listed according to ecological reserve, from most indebted)</th>
<th>BIOLOGICALLY PRODUCTIVE GLOBAL HA PER CAPITA (Biocapacity)</th>
<th>ECOLOGICAL FOOTPRINT (gha per capita)</th>
<th>ECOLOGICAL RESERVE (The difference between a country’s bio-capacity and its footprint: negative indicates ecological debt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>5</td>
<td>9.4</td>
<td>-4.4</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1.6</td>
<td>5.3</td>
<td>-3.7</td>
</tr>
<tr>
<td>Germany</td>
<td>1.9</td>
<td>4.2</td>
<td>-2.3</td>
</tr>
<tr>
<td>Western Cape</td>
<td>2.03</td>
<td>3.35</td>
<td>-1.32</td>
</tr>
<tr>
<td>PLANET EARTH</td>
<td>2.1</td>
<td>2.7</td>
<td>-0.6</td>
</tr>
<tr>
<td>India</td>
<td>0.4</td>
<td>0.9</td>
<td>-0.5</td>
</tr>
<tr>
<td>Uganda</td>
<td>1</td>
<td>1.4</td>
<td>-0.4</td>
</tr>
<tr>
<td>Ghana</td>
<td>1.2</td>
<td>1.5</td>
<td>-0.3</td>
</tr>
<tr>
<td>Malawi</td>
<td>0.5</td>
<td>0.5</td>
<td>0</td>
</tr>
<tr>
<td>South Africa</td>
<td>2.03</td>
<td>2.29</td>
<td>-0.26</td>
</tr>
<tr>
<td>Swaziland</td>
<td>1.6</td>
<td>0.7</td>
<td>0.9</td>
</tr>
<tr>
<td>Brazil</td>
<td>7.5</td>
<td>2.4</td>
<td>4.9</td>
</tr>
<tr>
<td>Australia</td>
<td>15.4</td>
<td>7.8</td>
<td>7.6</td>
</tr>
<tr>
<td>Canada</td>
<td>20.1</td>
<td>7.1</td>
<td>13</td>
</tr>
<tr>
<td>Gabon</td>
<td>25</td>
<td>1.3</td>
<td>23.7</td>
</tr>
</tbody>
</table>

---


B There is no data for the bio-capacity of the Western Cape alone, and so this figure is derived by subtracting the Western Province footprint from the figure for South African bio-capacity. Since the bio-capacity of the Western Cape is almost certainly greater than the South African average, this number over-estimates our ecological deficit.
In Africa, the per capita footprint is 1.1 global hectares, smaller per person than in any other region of the world, and about half the global average (Figure 3). In contrast, Africa’s bio-capacity is 1.3 global hectares per person, slightly more than Africans use, but 28% less than the world-average of 1.8 global hectares available per person (2003 data). Figure 4 and Tables 2 and 3 show the latest available data on South Africa’s bio-capacity and ecological footprint.

**South Africa**

South Africa’s Ecological Footprint increased from 1.8 gha per person in 1961 to 2.3 gha in 2003, although in recent years it has declined. With a population that grew to 45 million people in 2003, South Africa’s biocapacity of 2.0 gha per person in that year was half of what it was in 1961. At the same time, over this period its net export of biocapacity more than doubled, from 0.44 gha per person in 1961 to 1.01 in 2003. South Africa’s biocapacity was 90% of the size of its Ecological Footprint in 2003.
The Ecological Footprint and Biocapacity Data for South Africa provide some context for the Western Cape’s use of resources. To recap, ecological footprint describes the demands we put on our environment – for land, grazing, water, forestry, fishing etc. Biocapacity describes the environment’s ability to meet those demands. As Table 2 shows, in most instances, South Africa’s demands on its environment are fairly equally matched with the supply in most areas of land function. The problem area is our production of carbon dioxide, which pushes our combined ecological footprint well beyond our biocapacity. If our economy and population continue to develop along current lines, this situation can only worsen.

The Ecological Footprint and Biocapacity Data for South Africa provide some context for the Western Cape’s use of resources. To recap, ecological footprint describes the demands we put on our environment – for land, grazing, water, forestry, fishing etc. Biocapacity describes the environment’s ability to meet those demands. As Table 2 shows, in most instances, South Africa’s demands on its environment are fairly equally matched with the supply in most areas of land function. The problem area is our production of carbon dioxide, which pushes our combined ecological footprint well beyond our biocapacity. If our economy and population continue to develop along current lines, this situation can only worsen.

Table 2. South Africa’s National Footprint Accounts Summary

<table>
<thead>
<tr>
<th>LAND FUNCTION</th>
<th>FINAL CONSUMPTION [gha/cap]</th>
<th>LAND TYPE</th>
<th>BIOCAPACITY [gha/cap]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal grazing</td>
<td>0.23</td>
<td>Pasture</td>
<td>0.73</td>
</tr>
<tr>
<td>Fish</td>
<td>0.05</td>
<td>Fishing grounds</td>
<td>0.21</td>
</tr>
<tr>
<td>Forest products</td>
<td>0.12</td>
<td>Forests</td>
<td>0.52</td>
</tr>
<tr>
<td>Crops</td>
<td>0.38</td>
<td>Cropland</td>
<td>0.53</td>
</tr>
<tr>
<td>Built-up areas</td>
<td>0.05</td>
<td>Infrastructure</td>
<td>0.05</td>
</tr>
<tr>
<td>Sequestering CO₂</td>
<td>1.46</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL DEMAND</strong></td>
<td><strong>2.29</strong></td>
<td><strong>TOTAL SUPPLY</strong></td>
<td><strong>2.03</strong></td>
</tr>
</tbody>
</table>

Table 3. South Africa’s performance relative to world performance

<table>
<thead>
<tr>
<th>PERFORMANCE INDICATOR</th>
<th>SOUTH AFRICA</th>
<th>WORLD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ecological Footprint per capita [gha]</td>
<td>2.29</td>
<td>2.19</td>
</tr>
<tr>
<td>Biological Capacity per capita [gha]</td>
<td>2.03</td>
<td>1.82</td>
</tr>
<tr>
<td>Demand to Supply Ratio</td>
<td>1.13</td>
<td>1.21</td>
</tr>
<tr>
<td>Earths required if the world lived like South Africa</td>
<td>1.3</td>
<td>-</td>
</tr>
</tbody>
</table>
“THE WESTERN CAPE SUSTAINABLE DEVELOPMENT DEMANDS THAT WE PURSUE GROWTH STRATEGIES THAT ADDRESS THE NEEDS OF THE PROVINCE’S PEOPLE FOR EMPLOYMENT, HEALTH, EDUCATION AND THE ERADICATION OF POVERTY.”

2.1.2. The Western Cape’s Ecological Footprint

The Ecological Footprint for the Western Cape has been calculated using the available National Footprint Accounts for South Africa. The National Footprint Accounts are constructed using 2003 data from international data sets published by the UN Food and Agriculture Organisation, the International Energy Agency, the UN Statistics Division and the Intergovernmental Panel on Climate Change (IPCC).

These have been scaled to account for the differences in consumption and population between the Western Cape and South Africa as a whole. This top-down approach was adopted as accurate consumption data, which is necessary to calculate a specific regional Footprint, which is unavailable for the Western Cape.

Our analysis shows that the average consumption Footprint of Western Cape residents is 3.34 gha per person. This is approximately 46% above the South African average of 2.29 gha per person. Even the poorest tenth of the population of the Western Province has a Footprint of exactly two global hectares per capita, while the consumption footprint of the wealthiest 10% of the Western Cape is 11.3 gha per person.

The Western Cape’s demand on resources is distributed as outlined in the table below:

<table>
<thead>
<tr>
<th>ACTIVITY AREA</th>
<th>PERCENT OF TOTAL</th>
<th>LAND USE TYPE</th>
<th>PERCENT OF TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>35 %</td>
<td>Energy total</td>
<td>58 %</td>
</tr>
<tr>
<td>Mobility</td>
<td>19 %</td>
<td>Cropland</td>
<td>18 %</td>
</tr>
<tr>
<td>Housing</td>
<td>17 %</td>
<td>Pasture land</td>
<td>12 %</td>
</tr>
<tr>
<td>Unidentified</td>
<td>14 %</td>
<td>Forest</td>
<td>7 %</td>
</tr>
<tr>
<td>Goods</td>
<td>9 %</td>
<td>Fishing grounds</td>
<td>3 %</td>
</tr>
<tr>
<td>Services</td>
<td>5 %</td>
<td>Built area</td>
<td>2 %</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100 %</td>
<td>TOTAL</td>
<td>100 %</td>
</tr>
</tbody>
</table>

The largest contributor to the total Western Cape Ecological Footprint in terms of land-use is Food, followed by Mobility and then Housing. The Footprint activity categories are ranked in the following order based on their contribution to the total Western Cape Footprint:

- **Food (35%)** – The consumption of plant-based and animal-based food products. The Footprint includes land area required for food production, processing, packaging and storage.
- **Mobility (19%)** – Mobility includes the consumption of fuel for personal transport and the associated energy and built area Footprints for transport infrastructure. Western Cape expenditure on transport by rail and air well exceeded the South African average.
- **Housing (17%)** – This category includes the consumption of land and resources for the construction and maintenance of housing as well as the residential consumption of electricity and other fuels for lighting, heating and cooking.
- **Goods (9%)** – This category accounts for the consumption of products and materials together with their end-of-life disposal.
- **Services (5%)** – The energy and resources required to deliver services are included in this category.
- **Unidentified (14%)** – This category arises due to the incomplete nature of the assumption matrix for South Africa. It consists primarily of Energy land. Further research would allocate this Footprint contribution to the other main activity areas.

Based on this assessment the province’s real land use, taking into account consumption drawn from outside its physical boundaries and waste impacts beyond these boundaries, is calculated as being three-and-a-half times the actual area of the province.
Figure 6 shows the land-use type contributions to the Western Cape Footprint, with Energy land clearly dominating, followed by Pastureland and Cropland. Energy land mostly means the amount of land needed to absorb carbon emissions produced within the Western Cape.

Mark Swilling has applied the Ecological Footprint concept to Cape Town in particular:

“My own recent study of Cape Town found that there are nine different footprints in this city, and that the footprint in some of Cape Town’s richest suburbs were so large that 14 planets would be required if everyone lived like people in Camps Bay and Constantia – this is higher than the average United States footprint which is 9.5 planets. The footprint of Cape Town’s middle class suburbs is five to six planets [similar to the United Kingdom], and the footprint of the poor suburbs is half to one planet [similar to China and India]. It is highly unlikely that there are sufficient resources to eradicate poverty by increasing the footprint of the poor if the footprint of the rich remains so large.”

– MARK SWILLING

Figure 7. Consumption in gha/capita for different income groups (deciles) in the Western Cape. **19**
What the above section highlights is that we are not simply dealing with a case of slightly adjusting our lifestyles to address sustainability, but that we need to undergo a radical shift in our consumption and production patterns to prevent the natural environment – on which we depend – from being undermined.

As in most countries, high-income groups in the Western Cape consume far more than their fair share of the province’s resources. Arguably this means that the burden of reducing resource use should fall on these groups, rather than on the poor. Figure 7 above shows clearly that our present levels of consumption demand 1.85 planets and 1.72 South Africas. In other words, our demands on our environment are close to twice what either South Africa or the world can sustainably supply.

2.2. The Western Cape: Social sustainability

The United Nations’ Human Development Index (HDI) provides a very useful proxy for assessing the social wellbeing of a particular human population. Developed by the United Nations Development Programme (UNDP), the HDI provides a set of indicators that reflects health, education, per person Gross Domestic Product, and life expectancy. While it excludes many other important dimensions of wellbeing – such as happiness, human rights and the other tangible and intangible factors that contribute to human dignity – it nevertheless provides a more nuanced picture of wellbeing than a region’s GDP.

Countries with an HDI value higher than 0.8 are considered highly developed, those between 0.5 and 0.8 are of medium development, and those with an index value lower than 0.5 are the least developed countries. With an HDI value of 0.674, South Africa’s 2007/2008 world ranking was at 121, down from 120 in 2003. In Africa, South Africa as a whole ranks behind Egypt and Gabon. In 2003, South Africa and China had adjacent HDI rankings. China has, however, moved up nearly 40 places in the last five years.

All 21 of the world’s least developed countries are African.

As the HDI methodology changes from year to year, the HDI scores of particular regions cannot be compared on a year-on-year basis. This makes it difficult to obtain the most up-to-date comparative picture for the Western Cape, but the slight decline in the country’s global ranking, with the reduction in unemployment levels in the province suggest that the provincial HDI is either static or has declined since the 2003 index was compiled.

2.2.1. The Western Cape Human Development Index

The most recent HDI figures for the Western Cape date from 2003, which is a concern as planning for social development and sustainability demands consistent and up-to-date monitoring and evaluation that can be measured against global standards.

More recent human development component data is indeed available for the Western Cape in the provincial

<table>
<thead>
<tr>
<th>HDI RANKING</th>
<th>COUNTRY</th>
<th>HDI INDEX VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Iceland</td>
<td>0.968</td>
</tr>
<tr>
<td>3</td>
<td>Australia</td>
<td>0.962</td>
</tr>
<tr>
<td>12</td>
<td>United States</td>
<td>0.951</td>
</tr>
<tr>
<td>70</td>
<td>Brazil</td>
<td>0.800</td>
</tr>
<tr>
<td>81</td>
<td>China</td>
<td>0.777</td>
</tr>
<tr>
<td>112</td>
<td>Egypt</td>
<td>0.708</td>
</tr>
<tr>
<td>119</td>
<td>Gabon</td>
<td>0.677</td>
</tr>
<tr>
<td>121</td>
<td>South Africa</td>
<td>0.674</td>
</tr>
<tr>
<td>125</td>
<td>Namibia</td>
<td>0.650</td>
</tr>
<tr>
<td>177</td>
<td>Sierra Leone</td>
<td>0.336</td>
</tr>
</tbody>
</table>

Table 5. Human Development Index: Country ranking
Monitoring and Evaluation System for the iKapa GDS. These figures, however, reflect a slightly different methodology to that used by the UNDP for global HDI statistics, and do not offer a single overall index figure that summarises the component data.

The HDI for the Western Cape in 2003 was 0.77, compared to 0.67 for South Africa as a whole.21 As can be seen in Figure 9, the HDI for the Western Cape peaked at 0.79 in 1995; South Africa’s peak, in the same year, was 0.73. The 2003 HDI figures22 for the Western Cape show that the province is ranked higher than the South African average on every indicator other than gross enrolment (primary, secondary and tertiary), for which the country scored 0.80 in 2003. The Western Cape enrolment ratio increased from 0.76 in 1990 to 0.85 in 1995, but had dropped again to 0.75 by 2003.

There are particularly marked differences between province and country in respect of life expectancy; the average life expectancy of a citizen of the Western Cape in 2003 was over a decade more (61) than the average for South Africa (49). The figure of 61 for 2003 shows a decline from 64 years in the 1990s (see Figure 9).

The decline in life expectancy for South Africa as a whole has been more precipitous. In 1990, it was, at 61, substantially higher. The biggest contributor to declining life expectancy in South Africa across all provinces is HIV/AIDS. Life expectancy in the Western Cape has continued to drop beyond the period covered by the UNDP data, to 61.8 in 2005 and 61.2 in 2007.

Three key trends appear in the HDI data for the Western Cape (see Figure 10):

- The overall HDI for the province has declined over the past thirteen years, with the main contributor to this decline being a substantially smaller 'Life Expectancy at Birth' (see Box 2);

- 'Education Attainment' also plays a role, and is lower in the Western Cape than nationally.

- The province’s GDP per Capita has hardly changed since 1990.
2.3. Seeking Sustainability: Social Development within ecological limits

So how do we use these twin sets of vital indicators as a starting point for policy that will ensure not only our prosperity and quality of life, but that of future generations as well?

Figure 12 provides a powerful snapshot image of the state of humanity and the Earth today. It shows clearly that at present (and some would argue, more by accident than design) only one country in the world manages to combine high human development with low ecological impact: Cuba. At the top right are clustered wealthy countries that offer their citizens a good quality of life at a substantial cost to the environment. Lined up along the bottom are a range of mostly African countries that are not exceeding their ecological credit limit, but are far from delivering a decent quality of life to their citizens.

The challenge for us in the Western Cape is to amend our stagnating HDI figures, and to check and reverse the growth of our Ecological Footprint. At present, we are an ecological debtor nation. This means that we are using up our own resources faster than we can replace them, importing them from other nations and dumping our waste carbon in the shared global atmosphere. An analogy might be a car factory that has started using its own machinery as raw materials.

The problem with allowing our Ecological Footprint to continue expanding is that we cannot predict exactly what consequences are likely to follow and when: disturbances to agriculture and water availability may follow climate changes; problems with pollination (which will undermine agricultural productivity) may follow biodiversity loss; the areas in which diseases such as malaria are present may shift significantly. This last example would probably not directly affect the Western Cape; however, it might (again by way of example) lead to changes in migration and food availability that would

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Box 2: Life Expectancy Trends in the Western Cape

- Life expectancy and HIV/AIDS
  - While life expectancy for South Africa dropped precipitously from 61 in 1990 to 49 in 2003, the decline in the Western Cape has been somewhat smaller, from 64 to 61.
  - The decline in life expectancy in the Western Cape is illustrated in the figure below.

- Estimated HIV prevalence in the Western Cape by percentage

<table>
<thead>
<tr>
<th>Year</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>3.30</td>
</tr>
<tr>
<td>2002</td>
<td>3.82</td>
</tr>
<tr>
<td>2003</td>
<td>4.27</td>
</tr>
<tr>
<td>2004</td>
<td>4.68</td>
</tr>
<tr>
<td>2005</td>
<td>5.04</td>
</tr>
<tr>
<td>2006</td>
<td>5.35</td>
</tr>
<tr>
<td>2007</td>
<td>5.62</td>
</tr>
</tbody>
</table>

The Western Cape is fortunate that it does not bear the same burden of disease with respect to HIV/AIDS as does the rest of the country. By 2006, the prevalence in the province was 15.2%, compared to 29.1% for the country. The province has taken the lead in treating HIV/AIDS, and by 2005, was already providing antiretroviral treatment to 65% of those who needed it, with the equivalent national figure being just 10%.

Again, while the overall figures suggest that the province has a relatively low prevalence, the single figure masks some disturbing trends, such as a nearly three-fold increase in HIV prevalence in the Central Karoo, from 8.3% in 2006 to 23.6% in 2007. This is further explored in the section on health on page 42.

A declining life expectancy has significant implications for sustainability: depending on the point at which increased deaths are occurring, it can place additional strain on families through loss of income and support. It can also lead to loss of knowledge and expertise, and so contribute to social fragmentation and poverty. While a declining life expectancy can mean that certain human impacts on the environment are reduced in the short term, in the long term, declining HDIs are likely to lead to increased birth rates and further pressures on the environment if women’s access to education and health care are affected. Declining HDIs also frequently result in resources needing to be channelled into these areas at the expense of other areas of sustainability.
affect us. Already the province is growing through substantial in-migration, as economic pressures in other provinces and surrounding countries grow.

Turning the province towards a path of sustainable development that serves all its people will demand a creative and well-educated population, which is why attention to the indicators offered by the Human Development Index and the targets defined by the Millennium Development Goals are vital. In this respect, it is encouraging that the Western Cape has made substantial advances in education since 1995.25

A particularly vital aspect of sustainability is the link with economic development, without which it is difficult to purchase the social goods needed for human development. Sustainability thinking is being used in the financial sector now to analyse risk, investment and lending criteria.

Much thought should be given to the levels of economic inequality in the Western Cape, which mirror those in the rest of the country. In 2008, the Western Cape’s Gini coefficient (a measure of economic inequality) was 0.60, which is lower than the national figure of 0.67, but still substantially higher than the 0.20 to 0.40 range typical of those countries that rank high on the Human Development Index.

This section has highlighted the scale and urgency of the sustainability crisis. In the sections that follow, we outline in more detail the current state of the provincial economy, society and the environment; the sustainability challenges that we are facing, what we as a province are doing to address these challenges and where we feel we are falling short.

Sustainable development can be assessed using the Human Development Index (HDI) as an indicator of socio-economic development, and the Ecological Footprint as a measure of human demand on the biosphere. The United Nations considers an HDI of over 0.8 to be ‘high human development’. An Ecological Footprint less than 1.8 global hectares per person makes a country’s resource demands globally replicable. Despite growing adoption of sustainable development as an explicit policy goal, most countries do not meet both minimum requirements.

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**SUSTAINABLE DEVELOPMENT REPORT 2008**

**“TURNING THE PROVINCE TOWARDS A PATH OF SUSTAINABLE DEVELOPMENT THAT SERVES ALL ITS PEOPLE WILL DEMAND A CREATIVE AND WELL-EDUCATED POPULATION, WHICH IS WHY ATTENTION TO THE INDICATORS OFFERED BY THE HUMAN DEVELOPMENT INDEX AND THE TARGETS DEFINED BY THE MILLENNIUM DEVELOPMENT GOALS ARE VITAL.”**

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CHAPTER 3

PROGRESS REPORT 2 – Integrating sustainability in Provincial policy

This section reviews the extent to which sustainability principles have been integrated into the Province’s core functions as government, through the implementation of its policy and legislative activities. The section has been structured in accordance with the goals and objectives of the iKapa GDS (see Box 3), making provision (under Objective III) for the thematic areas of the Provincial Sustainable Development Implementation Plan (SDIP). We have sought to highlight the sustainability linkages across the different goals and objectives, emphasising the need for increased inter-departmental co-ordination.

For each objective, the current situation in the Province is outlined to provide context to the issue. We briefly outline our approach to integrating sustainability issues and review our performance, commenting on our progress in implementing sustainability into the core function being discussed. Various case studies have been selected to illustrate different aspects of the four components of sustainability – economic, social, environmental and governance – and at times to describe the engagement of external stakeholders.

“For the Western Cape, sustainable development demands that we pursue growth strategies that address the needs of the province.”

Box 3 iKapa GDS: Goals and Objectives

In this section of the report, we review our performance against the Goals and Objectives of the iKapa GDS. The environmental goal and objective has been expanded to provide for the policy objectives included in the Provincial Sustainable Development Implementation Plan.

GOAL I GROW AND SHARE THE ECONOMY (page 29)
- Objective 1: Broaden economic participation and reduce poverty
- Objective 2: Stimulate efficient and effective infrastructure

GOAL II BUILD A MORE EQUAL AND CARING SOCIETY WHERE POVERTY IS ERADICATED (page 36)
- Objective 3: Promote liveable and caring communities
- Objective 4: Improve resilience and tolerance within and between communities
- Objective 5: Enhance human capacity

GOAL III PROMOTE ECOLOGICALLY SUSTAINABLE DEVELOPMENT (page 45)
- Objective 6: Enhance sustainable resource use
  - Climate Change
  - Sustainable Energy
  - Sustainable Water Use and Management
  - Sustainable Waste Management
  - Ecosystem Services Management and Biodiversity
  - Coastal Management

GOAL IV FOSTER GREATER SPATIAL INTEGRATION (AND IMPROVED TRANSPORTATION) (page 59)
- Objective 7: Ensure greater spatial integration
- Objective 8: Develop an effective public and non-motorised transport system

GOAL V Ensuring effective governance and institutional strengthening (page 64)
- Objective 9: Build effective governance institutions
3.1. GOAL I – Growing and sharing the economy

3.1.1. OBJECTIVE 1 – Broadening economic participation and reducing poverty

The Western Cape has a well-balanced economy with a diverse range of industries and niche sectors. While overall economic growth is healthy, the Province is facing some serious challenges. Global economic developments have placed significant pressure on export-oriented industries in the Western Cape, while inflation accelerated and interest rates increased during 2008, causing declines in consumer spending. Further decreases in consumer spending have been caused by huge household debt as well as the National Credit Act.

In addition to producing a significant share of the national skills developed in tertiary institutions,27 the Western Cape also attracts much of the country’s skilled labour due to the region’s lifestyle and natural environment. Illiteracy rates in the Western Cape nevertheless remain high, particularly in the rural areas, with the Central Karoo recording illiteracy rates of 37% for people over the age of 14.28

Although the Western Cape has experienced economic growth, the levels of poverty and inequality have grown from 23% in 1999 to 28% in 2005.29 While some of this increase is due to the influx of unskilled migrants, this trend is cause for concern. Between 2001 and 2005, broad unemployment in the Western Cape increased by 6.8% a year to reach 25.5%. An outline of the sectoral contributions to employment in the Western Cape is provided in Figure 14. Recent trends have shown job losses in the primary and secondary sectors and job gains in the service sector, indicating that the whole economy is shifting towards activities in the tertiary sector.30 It must be noted that these figures and analyses are for the formal economy only. Assuming that the South African labour market breakdown of 48.7% informal workers, 22.5% intermediate workers and 28.9% formal workers holds for the Western Cape, a focus on only the formal sector in this report clearly leaves gaps. Province does implement initiatives aimed at raising labour from the second to the first economy, and these are discussed in further detail below.31

The informal economy is not a separate sector, but rather consists of informal workers who are geographically scattered, unskilled and who often have fewer resources than their formal counterparts. Ten percent of people employed in the Western Cape work within the informal economy. The individual incomes that the informal workers earn are often low, but cumulatively, the “second economy” contributes a significant R5.5 billion annually to the Western Cape’s gross geographical product (GPP). It is estimated that informal activities contribute between 8 and 10% to the country’s gross domestic product (GDP).32 The number of people employed in the informal economy in the Western Cape is considerable, but smaller than that of the national informal economy. According to the 3rd Quarter Labour Force Survey (LFS) 2008 data, more than 180 326 individuals were employed in informal activities in the Province.

Informal workers in the Western Cape have higher educational qualifications in comparison to national averages and other provinces. More than 66.7% of people working in the informal economy of the Western Cape have secondary schooling qualifications. There is concern that the growth strategy of most municipalities seems to be vested in property development – mostly in the high income bracket – as a mechanism to stimulate economic growth and generate funding for socio-economic upliftment (i.e. cross-subsidisation). The “trickle-down” economics, however, have not been shown to work and the developments have in fact increased inequality, increased the maintenance burdens of municipalities and are extremely resource intensive.

The impact of economic growth on the natural environment – including the increased consumption of energy and water and the increased production of waste being released into the environment – has not been ascertained. It is recognised that this impact will need in future to be calculated with a view to assessing the long-term sustainability of our economic policies and programmes.

Figure 14. Sectoral contributions to employment in the Western Cape

![Sectoral Contributions to Employment in the Western Cape](image-url)
3.1.1.1. Our activities to broaden economic participation and reduce poverty

“The orientation of our programmes is not to create short-term jobs, but jobs that are sustainable.”

– DEPARTMENT OF ECONOMIC DEVELOPMENT AND TOURISM ANNUAL REPORT

All economic development support in the Western Cape is guided by the Micro-Economic Development Strategy (MEDS). The MEDS seeks to stimulate the following specific high-potential sectors: tourism, business-process outsourcing, servicing the oil and gas industry, clothing and textiles, call centres, ICT, film, boating, biotechnology, music, fashion, mariculture, performing arts, visual arts and tooling. The Province also drives a number of thematic strategies that cut across these high potential or priority sectors. In addition, MEDS research focuses on priority areas, one of which is to gain an understanding of the informal trade within the informal economy.

It is estimated that 68,746 jobs have been created through the MEDS initiative since 2004/2005. Notwithstanding the evident contribution that MEDS has made to delivering sustainable economic development, we recognise that progress still needs to be made to attain the Millennium Development target of achieving full and productive employment and decent work for all, and the ASGISA goal of ensuring that all citizens benefit from shared growth and have opportunities for employment.

Economic development support is provided by the Department of Economic Development and Tourism across three key programmes:

- integrated economic development services;
- trade and industry development; and
- business regulation and governance.

We explore the first two of these programmes below.

INTEGRATED ECONOMIC DEVELOPMENT SERVICES

Integrated economic development services are provided through programmes of enterprise development, local economic development (LED) and economic empowerment. The focus of enterprise development is on advancing businesses from the informal to the formal economy through access to finance, training, mentorships and business related infrastructure. The RED Door programme provides business advice and support to SMEs throughout the province through its centres and has assisted 10,769 businesses in the last year. The Mobile RED Door service was recently established to provide outreach support and has assisted 1,461 individuals in the last year.

Together with the City of Cape Town and the private sector, we have been hosting a Small Business Week over the past seven years. The event aims to support businesses by providing access to information, finance, marketing and capacity building for SMMEs. Between 2006 and 2007, delegate numbers increased from 4,117 to 7,690, showing an increased interest in the opportunities the event provides. Our Siyabulela Deliverable Programme has provided non-financial assistance to 126 beneficiaries in the last year and has extended its services to provide ongoing mentorship for a further five months to promote sustainability of the businesses supported.

The Business Assistance Support Programme assists clients who are regarded as ‘unbankable’ by commercial banks, offering them financial and non-financial support. The Province’s Survivalist Programme works to advance survivalist businesses into micro businesses. Lastly, a Provincial Co-operative Strategy has been developed in partnership with the Development Bank of South Africa, which aims to increase the number, spread and sustainability of co-operatives operating in the Western Cape.

We provide local economic development support to municipalities by reviewing their integrated development plans (IDP) to assess alignment with the economic development priorities of the area and by providing expert advice on economic development issues and challenges. In the Drakenstein Municipality, the departments for the environment and economic development have collaborated to align the municipality’s economic development plans and spatial development framework.
There have been a number of challenges over the last year that affect the enterprise development arena. These include:

- Nine consecutive interest rate hikes that have affected entrepreneurs and businesses through increasing the costs of BEE deals;
- Banking institutions requiring up to 30% collateral;
- Delays in being able to finalise the Provincial Preferential Procurement Policy following delays at a national level;
- Constraints in the capacity levels of service providers, particularly in rural areas; and
- High rates of staff turnover within the Provincial Government (see page 74 below).

TRADE AND INDUSTRY DEVELOPMENT

The Province’s Trade and Industry Development programme focuses on the 16 priority sectors outlined in the MEDS. These sectors have been selected for their growth potential, specifically with regard to exports, where returns are promising, where job creation is likely to be significant and/or there is a substantial multiplier effect, where barriers to transformation can be resolved and where Provincial Government can play a role. We have not, however, taken into consideration the impact of these sectors on the natural environment, nor have we considered how the promotion of additional sectors might assist us in addressing our provincial sustainability challenges. Support provided to these sectors includes infrastructure development, skills development – a sector skills strategy is being formulated - and innovation, the support of a growth programme through marketing and investment facilitation, and the promotion of downstream activities to expand economic participation opportunities. This support comes through cluster initiatives in the form of Special Purpose Vehicles (SPVs), which are made up of representatives from government, industry, labour, academia and 90 industry specialists.

Through the SPVs we have provided support to a large number and wide range of businesses:

- 3 500 members representing firms employing 48 000 people have been engaged with;
- 9 500 people attended 300 events;
- 17 000 enquiries have been dealt with;
- 70 trade delegations have been hosted and more than 1 100 companies have been actively provided with export support;
- 2 000 SMEs have been actively assisted and just under 15 000 person days of training provided;
- R145 million in new investments has been facilitated, creating 1 700 jobs; and
- 111 new businesses have been launched, with 1 400 jobs being created through SME programmes.

Table 6. Economic development achievements 2007/2008

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jobs facilitated</td>
<td>8 964</td>
</tr>
<tr>
<td>SMEs assisted</td>
<td>18 737</td>
</tr>
<tr>
<td>Investment facilitated</td>
<td>R1 465 704 525</td>
</tr>
<tr>
<td>Persons trained</td>
<td>12 609</td>
</tr>
<tr>
<td>Businesses established</td>
<td>114</td>
</tr>
<tr>
<td>SMEs funded</td>
<td>385</td>
</tr>
</tbody>
</table>

Table 6 provides an indication of the Province’s success in facilitating the creation of more jobs, assisting new and emerging entrepreneurs and facilitating investment in the Western Cape. The key challenge with regard to trade and industry development is ensuring sufficient financial and human capacity to develop and implement the sector strategies. Questions have been raised as to whether we are spreading ourselves too thinly, given our current capacity and funding constraints.

The Plek Plan programme identifies local economic opportunities in the province - the selection of these does not necessarily consider sustainability in the broad sense. Nine opportunities have been identified in the last year and five of these have now received financial support. The programme has drawn up 24 economic profiles of regions that will feed into municipal economic development strategies and plans. The Rural Economic Assistance Fund (REAF) provides financial and non-financial support to community-based projects that have the potential to become community-owned enterprises.

In pursuit of economic empowerment, Province has finalised the Provincial Broad-Based Black Economic Empowerment (BBBEE) Implementation Strategy. The next step will be to determine the current BBBEE status levels of companies in the province and to identify which sectors may require support. Companies will then be assisted in understanding the seven pillars of BBBEE and how they can implement the policy.

It is envisaged that BEE information hubs will be established at the RED door centres and that BEE support will be linked with helping companies to understand and access the Provincial Government tender process. Fourteen workshops have been held in the last year, focused largely on the sector charters that currently exist and a BBBEE newsletter will be published in 2009. The Western Cape Preferential Procurement Policy is currently being revised to ensure that it is aligned with the BEE Codes of Good Practice and to encourage the Province to do business with those willing to change.
Commentary
INTEGRATING SUSTAINABILITY INTO OUR ECONOMIC DEVELOPMENT WORK

The iKapa GDS views ecological challenges as potential economic opportunities that could lead to job creation in sectors such as waste recycling, renewable energy, biodiversity conservation (such as Working for Water), ‘green’ products, sustainable forestry, sustainable fisheries, sustainable food production (particularly on small farms near urban areas) and event greening. We believe that ecological resource use should inspire innovative thinking and eventually a totally different approach to development that results in more effective use of financial resources.

We recognise that we have not yet made sufficient provision for the environmental economy sectors in the MEDS, and believe that we may need to review the MEDS to meet the fairly recent shifts in market demands for this sector, as well as to stimulate demand for the sector and thus support other related Provincial strategies and imperatives.

We also acknowledge the need to consider the ecological and social sustainability implications of certain of the MEDS focus sectors. We need to assess whether we are promoting economic development at any cost, and, if this is the case, reassess what type of economic development we do in fact want to promote and support. The challenge remains of how to decouple economic growth and poverty eradication from rising levels of natural resource use and waste production over time.

IDPs and SDFs are faring poorly in aligning spatial priorities with priorities for social integration, in reducing inequality and in stimulating local growth opportunities for disadvantaged communities. Support and guidance is required.

Our Preferential Procurement Policy has enabled historically disadvantaged individuals to become suppliers to the Province, thereby providing them with a relatively secure market.

For the purposes of this year’s sustainable development report, we have chosen to focus on two sectors of the economy, agriculture and tourism. Agriculture was selected as it has for some time been under increasing pressure to balance particular elements of sustainability, and so offers some interesting case studies in how it has addressed this challenge.

The tourism sector was selected because tourists to the Western Cape are largely attracted by the region’s natural beauty. This means that even as the tourism industry expands its role in the economy, providing jobs and supporting communities, it must limit its negative impacts and protect the natural environment on which its business depends.
Focus on the Agricultural sector

The agricultural sector poses some interesting questions for sustainability in that, for some time now, it has been forced to deal with the economic imperatives of a growing industry that is largely reliant on exporting its produce; the social implications of food security and large numbers of primarily unskilled people relying on the sector for employment; and the environmental realities of scarce supplies of natural resources, such as water, and the direct effects of climate change.

The Western Cape is a key part of the South African agricultural sector. The province is responsible for 21.4% of the total value of agricultural production in South Africa and employs more than a quarter (25.2%) of the farm workers of South Africa.

Over the ten-year period from 1997 to 2006, agricultural exports from the Western Cape increased almost fourfold. Over this same period agriculture’s share of exports has been fluctuating between 50% (1999) and 38% (2006). The wine industry has probably been the most successful in this regard, increasing not only absolute volumes of exports, but also the share of the harvest that is being exported.37

Some of the other major agricultural industries have also significantly increased their export presence, with the table grape industry almost tripling its export value to close to R1.8 billion, while apples and pears doubled to R1.36 billion.

Some of the smaller industries, such as tea, spices, meat, vegetable fibres and fruit juices have also shown significant growth over this period.38 This indicates a broadening of the export base in the province.

Indigenous crops – such as the fynbos products and indigenous teas – and dairy, beef, ostrich and poultry production are growing sectors.

Agricultural and Agribusiness Strategy

The Agricultural and Agribusiness Strategy for the Western Cape took two years to negotiate and was finally signed by the four social partners on 12 June 2006. Eight themes, including support to land reform, human resource development, competitiveness, infrastructure, R&D, farmer support, food safety & security and institutional development were deliberated and a total of 90 specific interventions were agreed upon. Progress is currently being monitored.

Food security

The National Agricultural Marketing Council reported that the January 2008 year-on-year increase in the Consumer Price for Food was 13.4%. This means that the cost of the food basket bought by the average South African has increased significantly faster over the past year than the official 3%–4% inflation target of the Reserve Bank. In the case of certain individual products, these price increases were even higher: onions (69.4%), cooking oil (66%), pumpkin (59.4%), potatoes (47%) and oranges (45.4%).39

The daily SAFEX spot price for wheat serves as an illustration of the underlying forces driving this increase in food prices. The spot price of wheat increased from R1 235 per ton on 25 February 2005 to a high of R4 298 on 26 March 2008 – an increase of close to 250% over this three-year period. Key influences on food prices have been international commodity prices, exchange rates, import and export parity rates, droughts in certain key growing areas, and increased consumption as a result of economic growth. The domestic competitive structure of the industry also affects the effectiveness and transparency of price formation. The current rise in food prices is not regarded as a short-term anomaly but as the beginning of an era of increased prices.40

To ensure food security for poor communities throughout the province, a specific emphasis has been placed on poverty nodes and food-insecure households. A provincial forum for food security will be rolled out to the districts in the near future. The Department implemented 60 food security projects –17 of which were in the City – across

Figure 16. Agriculture in the Western Cape Province in comparison to those of the other nine provinces.36

<table>
<thead>
<tr>
<th>Province</th>
<th>% of National Age</th>
<th>% of Employees</th>
<th>% of Provincial Budgets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Cape</td>
<td>30%</td>
<td>30%</td>
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<tr>
<td>Free State</td>
<td>25%</td>
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<tr>
<td>KwaZulu-Natal</td>
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<td>Mpumalanga</td>
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<td>North West</td>
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<td>Eastern Cape</td>
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<tr>
<td>Western Cape</td>
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<td>Free State</td>
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<td>Eastern Cape</td>
<td>5%</td>
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the Province, with a budget of R 6.6m, benefiting 1061 people. During the
adjustment budget the Department received an additional R 2.5 m for the
delivery of the food security suitcase. The food security suitcase is a household food
production package, which comprises garden tools, drip irrigation system,
seeds/seedlings, compost, wheelbarrow, domestic hosepipe and hand tools. By
the end of March 2009, the Department had delivered a total of 385 households
food production packages to vulnerable households in the project, 210 of which
were linked to the Delft Green Rights project. Food security projects have also
included the increased establishment of food gardens in urban areas, with a total of
1 177 individuals being supported across the province in 2008 / 2009 – of whom 555
are women, 415 are younger than 35, and 70 are disabled.

In addition, the Philippi Urban Agricultural Hub is being further
developed. In 2006, a Memorandum of Understanding was signed between
the Department, the Muslim Judicial Council and a commercial farmer. This
tri-partnership will encourage vegetable growing in the area by establishing and
maintaining vegetable research trials, demonstration blocks, and production and
market access training to emerging farmers in the area. As part of this
agreement, 45 emerging farmers will be trained in various aspects of market
access requirements.

Further, during 2008 / 2009, 100 815 school children were added to the school
nutrition programme, with 334 287 school children in the poorest regions of
the Western Cape now receiving a daily meal at school.

- Supporting emerging farmers
There are currently approximately 5 660 emerging farmers in the Western Cape,
who actively farm on more than one hectare of land or own more than one
large stock unit. These farmers employ more than 388 permanent and 2 715
part time farm workers and about 31% of these farmers are female.44 Province
provides support to emerging farmers through providing a mentoring scheme,
veteryinary treatment to animals, access to equipment, technology transfer services,
access to on-site advice, productive infrastructure, systems to improve their
production capacity, farming techniques to ensure more sustainable and profitable
farming and water infrastructure, appointing more field personnel to serve
these farmers, making training available to farmers [through the CIAT (Cape
Institute for Agricultural Training)], and facilitating access to markets and access
to export contracts.

The goal of land reform is not only to achieve its targets, but to help farmers to be successful and sustainable in order to complement the current core of
commercial farmers.

In 2006, a pilot project of the Micro-Agricultural Financial Institutions of South
Africa (MAFISA) was implemented in three municipalities, namely Swartland, Berg
River and Witzenberg. The purpose of the scheme is to finance production costs of
previously disadvantaged individuals in the Agricultural and Agri-Business Sectors up
to a maximum of R100 000 per person.

While an AgriBEE Charter was released in March 2008, only 5% of farms in the
Western Cape are required to comply with the charter. The other 95% of farms in
the Western Cape are exempt due to having an average turnover of less than
R5 million. While this may seem to water down the purpose of the charter, it will
enable government to focus its efforts on that 5%: 2 300 large farms.

- Sustaining natural resources
Water is a scarce and very valuable resource in the province, and agriculture
accounts for approximately 50% of the total water use in the province. It is
therefore crucial that agricultural water use efficiency and water losses from
channels and other supply systems be addressed. The Department of Agriculture
is tackling this through two channels: the launch of a water-wise and biodiversity
awareness campaign in the two district municipalities with highest agricultural

Chi apt 3
F O C U S O N T H E T O U R I S M S E C T O R
In 2006, the Western
Cape received 1.74
million international
visitors and 3.2 million
domestic visitors with
a cumulative spend of
R19.8 billion. We need
to ensure that as a
province we can support
this sector of the
economy by providing
a good experience
to visitors without
negatively affecting
the social and natural
environment upon which
the tourist industry
relies. Our strategic
priorities to allow for
a well-managed and
sustainable industry
include R4.5 million
being spent on training
3 358 people in the
last year; supporting
emerging tourism
to ensure the safety of
to export contracts.

enterprises; and
has provided
support is provided
assessments of
each participating
each participating
hotel to establish a
baseline of energy,
and waste;
and to identify and
quantify interventions
that could result in
environmental and
financial improvements.
A guideline has been
produced for the
industry, illustrating
interventions that result
in better resource use
and outlining capital
costs and payback
periods for each
intervention.

- Cleaner production
and green rating in the
hospitality sector
In 2005, to ensure
that the growth in
tourism to the
Western Cape does not
damage the province’s
natural resources, the
Department of
Environmental Affairs
and Development
Planning (DEA&DP)
developed the Cleaner
Production in the
Western Cape Tourism
and Hospitality Project.
The project identifies
and implements
opportunities for
saving energy and
water, and minimising
and managing waste.
Support is provided
through ‘walk through’
assessments of
each participating
hotel to establish a
baseline of energy,
and waste;
and to identify and
quantify interventions
that could result in
environmental and
financial improvements.
A guideline has been
produced for the
industry, illustrating
interventions that result
in better resource use
and outlining capital
costs and payback
periods for each
intervention.
water consumption; and the validation of remote sensing technology (satellite imagery) to determine agriculture water use efficiency in the Winelands Region. The second of these is addressed further in the section on water (see page 50). Water quality is addressed by the conservation farming practices project, which has been run for many years, with issues of chemical pollution being addressed through supporting organic farming practices. Extensive work has been done in the past 50 years in combating erosion on farms – from mechanical protection works to biological conservation practices. The conservation farming project has been addressing the issue of depleting soil fertility, with the current focus being on the Rooibos tea area.

■ The LandCare Grant

The purpose of the LandCare Grant is to optimise productivity and sustainable use of the natural resources to ensure greater productivity, food security, job creation and a better quality of life for all. The programme highlights the primary causes of natural resource decline and explores how these can be addressed. LandCare is community-based and community-led and seeks to achieve sustainable livelihoods. A junior LandCare programme was run in the Little Karoo priority area. The area experiences various social problems and the loss of natural resources and biodiversity in the Little Karoo is alarming, as are the declining water resources.

Groups consisted mainly of intermediate phase learners (grades 4–6) and their teachers. There was great community involvement in the planning of the project including the content of what was to be taught. Teaching was run through puppet shows and two-day camps, where participants were taught about natural resources and how to use them sustainably; and about biodiversity and the role that it plays in conserving our water resources and mitigating climate change.

The project was delivered through a partnership of DoA, DoE, DWAF, CapeNature, LandCare, Gouritz Initiative; Cultural Affairs; South West Districts Cricket Board; Minwater Eco Adventures and Local Individuals.

The project is backed by biodiversity conservation projects at a school or community level. Feedback obtained over the last three years – with 4 500 learners reached in one year – is that the ‘Conservation Message’ is getting through.

■ Technology support for agricultural extension officers

A smart pen has been developed by the Department of Agriculture (DoA) that will be used by farm extension officers in service delivery. The smart pen will enable extension officers to complete data forms while on a farm, with all information being sent directly to a central system at DoA. The central database will be used for auditing purposes, management and service delivery purposes and monitoring and evaluation purposes. It will remove the duplication of information collection and reduce the administration time of extension officers, allowing them to focus on more direct service delivery – assisting farmers to produce quality products.

Extension officers will also be able to tap into the central system to access information on crops, blights and other problems, and how these should be managed. In addition, they will be able to take photos with their cell phones, which will be sent to researchers for their responses. Along with the implementation of the new smart pen system, the DoA are setting up monthly meetings to help extension officers understand the system and share information.

All these initiatives are aimed at providing farmers in the Western Cape with more sound and timely advice, to ensure that the resources that they invest and the natural resources that they draw on are used in the most effective manner. These initiatives provide a more thorough service while reducing the environmental impacts of travel.

3.1.2. OBJECTIVE 2 – Creating effective infrastructure

Although we believe that investment in infrastructure is necessary to stimulate and maintain economic growth, a commitment to sustainable development requires us to carefully consider the nature and quality of the economic growth that we wish to support.

The infrastructure required for growth includes both connectivity infrastructure – such as improved mobility and ICT – as well as operational infrastructure, such as energy, water, sanitation, waste and roads. The way government invests in infrastructure determines the location, form and type of economic development in the province, providing us with significant leverage to influence the sustainability of this growth. The Strategic Infrastructure Plan (SIP) for the Western Cape provides an overview of what infrastructure is needed where and how this can be built over time as budgets allow. The challenge is to make sure that we design and construct this infrastructure in a manner that maximises economic growth and quality of life and minimises the negative impacts on the environment by ensuring efficient and sustainable resource use. This may mean prohibiting growth in certain areas and will mean incorporating sustainability criteria and new technologies into the terms of reference for designers and contractors, as well as linking implementation to pro-poor local economic development strategies.

The provision of well-located land, the accessibility of infrastructure to communities and the development of spatially integrated human settlements is discussed further in the section on sustainable human settlements on page 37. The development of sustainable transport systems is discussed on page 62. The inclusion of environmental specifications (green building designs) in infrastructure development is outlined in various sections of this report including: sustainable energy (page 48), sustainable transport (page 62), water supply and management (page 50) and the Province’s internal operations (page 68).
3.2. GOAL II – Building a more equal and caring society where poverty has been eradicated

3.2.1. OBJECTIVE 3 – Promoting liveable and caring communities

Providing a home for all who live in the province, and ensuring the development of sustainable human settlements, remains one of the top priorities of the Provincial Government.

In 2007/08, the department’s total housing grant expenditure came to R1.121 billion, resulting in our targets of building 16 000 houses and servicing 18 000 sites being exceeded, with delivery in 2007/08 amounting to 16 093 housing units and 18 064 serviced sites. While we recognise that there has been significant investment in social housing, with R4.5 billion being spent since 1994 and a further R3 billion earmarked for the next three years, enormous challenges still exist, including addressing the backlog of 410 000 houses in the province (see Table 7 for detail), this is set to grow to 804 000 by 2040 if the current delivery rate remains constant.

Table 7. Backlog of housing in the Western Cape by district

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>NUMBER OF UNITS OUTSTANDING</th>
<th>PERCENTAGE OF TOTAL UNITS OUTSTANDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cape Town</td>
<td>300 100</td>
<td>73%</td>
</tr>
<tr>
<td>Cape Winelands</td>
<td>38 522</td>
<td>9%</td>
</tr>
<tr>
<td>Overberg</td>
<td>17 427</td>
<td>4%</td>
</tr>
<tr>
<td>Central Karoo</td>
<td>2 522</td>
<td>1%</td>
</tr>
<tr>
<td>Eden</td>
<td>35 380</td>
<td>9%</td>
</tr>
<tr>
<td>West Coast</td>
<td>15 876</td>
<td>4%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>409 827</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Figure 17. Type of dwellings in the Western Cape

There are currently 223 informal settlements, holding roughly 135 700 dwellings, in the City of Cape Town. 116 informal settlements have been identified outside the metropolitan area. Our ‘Upgrading of Informal Settlements’ housing instrument, which was initiated towards the end of 2004, has resulted in 12 upgrades being completed, with a further 14 in the process of development. As the data in Figure 17 illustrates, there has nevertheless been an increase in the proportion of informal dwellings relative to formal dwellings, from approximately 15.1% informal:83.3% formal dwellings in 2002, to 21.4% informal:74.3% formal dwellings in 2007.

The core problem is that, if nothing changes, existing subsidies and interventions will deliver only 14 360 ‘RDP-type’ project-linked housing units per annum, mainly on the urban peripheries of the Western Cape’s towns and cities. R1 billion per annum is available via the DLG&H to fund a subsidized human settlement programme aimed at eliminating the backlog. Using current RDP-type housing, it will cost R8.1 billion to eliminate the backlog by 2010 and R4 billion to do so by 2015. With funding of R2 billion per year, the backlog would only be eradicated by 2030. With funding of R1 billion per year, the backlog will not be eradicated. In other words, government does not have sufficient funds to address the housing backlog in the short term using the traditional housing model and serviced sites model.

Guided by the Western Cape Sustainable Human Settlement Strategy (WCHSS), Isidima – which was launched in June 2007 – we are committed to promoting comfortable and caring communities by creating integrated and sustainable human settlements. Isidima means ‘enabling dignified communities’ and lays out how we will deliver on our promise of creating ‘a home for all in the Western Cape’, through a range of interventions – such as in situ upgrades, high density rental, social housing in mixed developments, backyards and greenfield sites – across different location types.
The WCSHSS interprets ‘sustainable human settlements’ in light of Section 24 (b) of the Constitution, which states that we are obliged to ‘secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development’.

– ISIDIMA 2007

While we act as the co-ordinating agent for the provision of housing, municipalities act as the delivery agents. There are sometimes conflicting priorities across the two spheres of government, which affects the effectiveness of the strategy.

The strategy recognises that effective delivery requires partnership working and a change in mindsets as to how and where housing is established. The strategy outlines three mind-shifts that are shaping the way forward:

1 THE SHIFT FROM HOUSING CONSTRUCTION TO ‘SUSTAINABLE HUMAN SETTLEMENTS’

Previous housing policy essentially defined the housing problem in terms of the numbers of homeless people who needed access to land and services. The solution was equally quantitative: provide a capital subsidy to cover the cost of land and services, and ensure access to affordable land in greenfield developments. This has led to a situation where low-income housing is established on the edges of urban areas, far away from job opportunities and resulting in high transport costs. Urban edge development has also threatened productive agricultural land and biodiversity, and increases the costs to government of transport subsidies and bulk infrastructure. The housing programme has largely made the poor poorer, while costing the state more than would compact solutions.

The Isidima approach is to focus on helping the poor to move into inner-urban areas, to encourage urban densification as opposed to urban sprawl. It is envisaged that this will reduce transport costs, improve employment opportunities and boost local demand for goods and services that will then stimulate local economic growth and justify expenditure on public transport. The Province runs a Geographic Information System (GIS), which integrates spatial information across departments and enables holistic planning of sustainable and integrated human settlements. This will also be supported by a Housing Demand Database, which is currently being compiled.

2 THE SHIFT TO SUSTAINABLE RESOURCE USE

One of the ten principal lessons drawn from the review of existing housing practices in the Western Cape was that the ‘issues of energy efficiency and environmental sustainability have been explicitly addressed in very few housing projects, but given the growing resource constraints (on water, energy and agricultural land, for example) this needs to change’. The Isidima strategy therefore endorses a sustainable resource use approach. The aspiration is that as society and policies move towards demanding more environmentally friendly building materials, new technologies for the treatment of sewage and recycling of solid waste, and the construction of energy-efficient buildings supplied by increasing quantities of renewable energy, this will stimulate a move towards more environmentally sustainable growth.

The National Department of Housing Framework for Environmentally Sound Housing (FrESH) (draft 2006) and the National Treasury’s A framework for considering market-based instruments to support environmental fiscal reform in South Africa (2006) recommend changes that could significantly reduce the resource intensity of housing and infrastructure construction. Once the barriers to the implementation of these frameworks have been unblocked, The Province will be ready to include the recommendations in its sustainable human settlements plans.

To begin the implementation of Isidima’s strategic aims, the Department of Local Government and Housing is currently drafting sustainability criteria for the assessment of human settlement projects. The criteria are to be applied at an early stage in the development and implementation of human settlement projects, acting as a planning tool rather than a project approval tool. The sustainability criteria take the form of two checklists: (1) pre-qualification criteria and (2) criteria for evaluating housing project benefits.
3 THE SHIFT TO REAL EMPOWERMENT OF OUR PEOPLE

This shift entails creating a space for genuine participation, engagement and empowerment of communities. It also entails further investigation into, and implementation of, micro-financing systems to play a role in the development and housing delivery process. Micro-financing can enable poor communities to take control of their finances and increase their economic power and ownership.

We recognise that we have a role to play in setting up partnerships between government and other stakeholders. Alternatives to individual ownership, such as communal tenders, need to be considered as they allow for more innovative designs, such as higher densities and communal spaces.

The overall aim is to ensure that the poor are fully integrated into our towns and cities, that we move away from a segregated housing market, and that densities do not drop below 100 people per ha. Essentially, government’s role will be to ensure access to land and services as a priority, but this will be done through close engagement and co-operation with communities who can be supported over time to build up their asset base, skills sets, social capital and access to a wide range of financial and institutional resources. The strategy cannot be implemented overnight, but will slowly be phased in as institutional capacity is built and as the instruments for implementation – such as different financing models – are developed.

Beyond dealing with the provision of housing, Provincial Government is underway with initiatives to enhance the dignity of existing home-owners and tenants. This includes improving the physical condition of housing stock in certain areas, providing people in areas like Delft and Walmer Estate with homeownership (about 1 200 households in 2008/09), providing housing opportunities for those in the GAP market (people earning too much to qualify for a housing subsidy and too little to access bonded housing) and providing rental options allowing previously marginalised people an opportunity to live close to job opportunities and amenities.

CASE STUDY

Paarl: Embakweni

A people’s housing project was embarked on in Paarl, where the community became involved in the development of their houses and helped to build them. The project included the training of the community to build the houses, with a focus on youth. In addition to the ‘normal’ houses built, ten houses were built, as far as possible using recycled materials and local stones as the primary building material. This enabled the community to build double-story houses bigger than the traditional RDP-type house. People’s Housing Projects is a slow delivery tool, but has been shown to work in cases such as this. Feedback sessions have been held with the community where we were challenged regarding housing quality and the life span of the recycled materials. The challenge is that communities regard recycled building materials as second-hand goods and want to know why they have to accept second-hand goods. They are also concerned about how long the materials will last. Our challenge, therefore, is how to move perceptions away from everyone needing their own stand-alone plot and a house that is made of brick and mortar.

Housing Volunteer programme

In the last financial year, a new programme, ‘1 000 Volunteers’, was introduced to augment our People’s Housing Process projects and tie them into community volunteerism. Over 1 050 volunteers are participating, including approximately 80 government officials and over 80 corporate volunteers. In Wallacedene, dedicated volunteers are involved in all aspects of the construction process, including foundations, bricklaying, plastering, painting, plumbing and finishing — thus gaining much-needed skills and construction experience.

3.2.2. OBJECTIVE 4 – Improving resilience and tolerance within and between communities

Drugs, crime and violence are still widely pervasive in the Western Cape, damaging its social fabric and human potential. These issues also affect the service delivery of the Province due, for example, to increased pressure being placed on health services, and vandalism and destruction of schools and public buildings. To address this concern, we have established a Social Transformation Programme that focuses on 27 areas in the province. These have been selected based on the poverty index (derived from indicators on household income, housing type, employment, literacy rates and the school enrolment of children aged six) and with consideration to trends relating to crime, drugs and gangsterism. The social transformation programme evolved from the need to transform communities, fight their social ills and link them to economic opportunities to fight crime, drugs, gangs and poverty and to accelerate growth and development. The geographical definition helps government to focus its effort and co-ordinate planning and implementation.

The Department of Community Safety’s (DCS) role in the fight against crime is to oversee the work of the South African Police Service, Metropolitan Police and the Provincial Traffic Service in the promotion of road safety on provincial roads, managing security risks in relation to provincial assets and building social cohesion and community solidarity within and across communities as a means to addressing crime. The department has built sustainable partnerships with a broad range of civil society organisations, focused on the 27 Social Transformation areas.

The National Crime Prevention Strategy guides our responsibility for crime prevention towards a proactive approach. A holistic approach is needed to prevent crime, which provides the DCS with the responsibility to build the agenda into the work of all departments.
Community Police Forums

Community Police Forums (CPFs) are financially supported and trained on holding meetings, involving communities, managing finances and applying for project funding. They hold community forums to identify priorities with regards to community safety and the Province also brings in external parties to facilitate safety audits. The Forums engage with leaders of communities as soon as conflict arises. During the reintegration of victims of the xenophobic attacks during 2008, CPFs were mobilised into understanding their responsibility to prevent such attacks from happening again.

CASE STUDY

Victim empowerment programme

If she wishes to report being raped, a woman normally has to go to a standard police station or community centre and explain her case without privacy. The Province has assisted SAPS in creating victim support rooms (now 173 across the province) that offer a more private and reassuring environment. Certain stations have now been equipped with a doctor’s examination room, interview space has been provided and staff have been trained to understand the support that women need. Volunteer counsellors have also been trained to provide added support, with a person on call 24 hours a day. During the last year, 31 725 people have been provided with care support services at victim support rooms.

Community Police Forums

Community Police Forums (CPFs) are currently managing finances and applying for project funding. They hold community meetings, involving communities, managing finances and applying for project funding. They hold community meetings, involving communities, managing finances and applying for project funding. They hold community meetings, involving communities, managing finances and applying for project funding.
3.2.3. OBJECTIVE 5 – Enhancing human capacity

There are two key elements associated with promoting enhanced human capacity throughout the province: skills development and health. Our progress in addressing each of these issues is briefly reviewed below.

3.2.3.1. Promoting skills development

'We invite all interested parties ... to engage with us critically and to work with us constructively as we seek to build an education system designed to transform lives and to build the future of this country.'

― YOUSUF GABRU: MEC FOR EDUCATION, WESTERN CAPE

The lack of skills is seen as a significant barrier to achieving the economic growth rates desired by the Province. Table 8 shows the increase in the demand for skilled labour in the Western Cape, illustrating that the province has experienced a more marked shift in the share of skilled labour than at a national level, with the share of skilled workers in total employment increasing from 18% to 26%.

Table 8. Comparative skills profile (percentage): Western Cape and South Africa, 1995 and 2005

<table>
<thead>
<tr>
<th></th>
<th>SKILLED</th>
<th>SEMI-SKILLED</th>
<th>UNSKILLED</th>
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<tbody>
<tr>
<td>Western Cape</td>
<td>1995</td>
<td>18</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>26</td>
<td>48</td>
</tr>
<tr>
<td>South Africa</td>
<td>1995</td>
<td>20</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>2005</td>
<td>22</td>
<td>48</td>
</tr>
</tbody>
</table>

Over the last five years, job creation in the province has been concentrated in the tertiary sector. While from 2000 to 2005, managers experienced the fastest average annual growth rate at 8.2%, unemployment over the same period increased by an average annual rate of almost 7%, with the broad unemployment rate at 26% in 2005. The latest Labour Force Survey, however, has stated that unemployment in the Western Cape has decreased to 16.9%. Forecasts of gross domestic product per region (GDPR) growing by 5.3% from 2007/08 to 2009/10 are driven by growth in tertiary sectors, such as financial and business services, wholesale and retail trade, tourism, transport and communication. Substantial growth for the construction sector is also predicted. The challenge we face, therefore, is to provide suitably skilled labour to match the demand from the growing industries in the provincial economy. A further challenge concerns the quality of education and training programmes, particularly in mathematics, language, ICT, business and entrepreneurship.

The Western Cape population has grown by 16.7% since 2001, placing increasing pressure on our education services to accommodate more learners. The growth in learner numbers has also been unpredictable, making the planning of service delivery, especially classrooms and teachers, extremely complex. High levels of illiteracy are found in predominantly rural areas, with illiteracy being particularly high for certain districts (up to 37%). With a strong correlation existing between illiteracy levels and the unemployment rate, this is obviously cause for concern. The dropout rate in high schools also remains a major challenge, with up to 50% of learners leaving school before reaching Grade 12.

The aim of the Western Cape Department of Education (WCED) is to ensure that all learners acquire the knowledge, skills and values they need to realise their potential, to contribute to the life of the country, to compete internationally and to build communities capable of managing their lives successfully and with dignity. This is done through providing learning facilities and resources, skills programmes for educators, nutrition programmes for learners, safe schools, facilities for special needs, HIV/AIDS education, support for HIV/AIDS affected learners, focused programmes on maths, science, literacy and numeracy, adult basic education and training, early childhood development programmes and examination services.

Beyond working with ‘normal’ schools, the WCED also provides educational material to prisoners and to patients in hospitals through educators based in these establishments. The WCED liaises with DECaS to link schools and sport and to support the museum schools and with DoA to promote agriculture in education. Bimonthly meetings are held with all provincial departments and roadshows to schools are held to help departments understand how to integrate their functions into the curriculum. The Province has invited other provinces to use their literacy and numeracy approaches and openly borrows ideas from other provinces who have influenced their thinking.

The MEDS provides the base for the creation of 100,000 jobs by 2014 through its sectoral approach. A skills assessment for the priority sectors is currently underway and will guide the focus of skills development programmes. This approach overlaps with that of the WCED and includes the building of partnerships with educational institutions, the promotion of key skills required, the establishment of learnership projects, and internships, the repositioning of full-time education colleges, an increase in the number of Adult Basic Education Training [ABET] schools, the expansion of early childhood development programmes and the
increased disbursement of bursaries.

Adult education is currently under review, moving away from a school-based approach to one that focuses on vocational skills. The WCED is currently reviewing what programmes are offered, what skills are required and how to bridge the gap between the two. We are currently focusing on four knowledge areas - agriculture, ancillary health, SMMEs, and tourism and hospitality - that need to be expanded to make learners more marketable.

Training on entrepreneurship is provided as part of the curriculum. In terms of career development opportunities, formal job shadowing programmes are run and schools actively engage in activities that expose learners to careers. Recent examples are working with the South African National Biodiversity Institute (SANBI) on exposing learners to careers in nature conservation and with the Department of Minerals and Energy (DME) on exposing learners to mining industry.

Environmental issues are well integrated into the curriculum and we have worked with schools to guide how this can be done. Through their own initiative, a number of schools are making money from waste management.

### CASE STUDY

**Technology to increase educator capacity**

The Khanya Project is an initiative of the Western Cape Education Department that was established to drive the use of technology in helping to address the increasing shortage of educator capacity in schools. The project was initiated to assist educators to increase their capacity through the use of technology; to coordinate the investments that businesses, NGOs, national and international donors are willing to make towards education; to bridge the digital gap between the less and more affluent schools; and to equip learners with technology know-how that will prepare them for the workplace. Achievements of the project to date are as follows:

- 974 schools have been helped to use technology effectively;
- Another 151 schools are in various stages of preparation for the next wave of implementation;
- A total of 38 782 computers are used in Khanya schools (of these 23 328 have been funded by Khanya or its donor partners, and the balance of 15 454 have been procured by the schools themselves).
- 22 533 educators are being taught how to make the most of available technology; and
- 755 169 learners are already reaping the benefits of the project.

At present approximately 20% of all costs are carried by the community and in turn, the facilities are made available to communities to enhance adult learning – in particular, computer literacy. In addition to using new equipment, Khanya also deploys good, second-hand equipment, provided by corporate partners. Once the project has been implemented, Khanya provides the school with a dedicated team of facilitators who visit the school on a regular basis until all the educators know how to use the technology properly.

The project has developed a methodology to assist schools in the developing world to move through the stages of infrastructure preparation, technology installation, training and support, maintenance and sustaining the facility. This methodology is fully documented and details are available on the Khanya website, which other organisations are encouraged to use.

Khanya has developed a unique model for sustainability, which is based on the principle of partnerships, particularly with community and micro organisations in alignment with NEPAD principles.

**Expanding early childhood development**

A programme was run in collaboration with the Principality of Monaco and the NPO sector to fund 841 early childhood development (ECD) sites. The programme includes the provision of kits of equipment to assist learning, posters advocating early registration for Grade R and the installation of jungle gyms and fencing at 100 mainstream schools that have grade R classes. The programme expanded ECD support to 5 218 children living on farms or in areas where there is no provision and won a Gold Ipumelelo Award in 2008.
3.2.3.2. Addressing provincial health concerns

The leading causes of mortality in the province are closely related to issues of development and poverty.

The top five causes of premature mortality for the province have been identified as:
- major infectious diseases, such as HIV/Aids and TB (22%) – with respiratory ailments being exacerbated or caused by poor air quality in certain areas;
- injuries due mainly to fatal road-traffic accidents and homicide (19.8%);
- cardiovascular disease, with major risk factors being obesity and lack of exercise (10.5%);
- childhood diseases (> 6%); and
- mental disorders.

“HIV/AIDS PREVALENCE FOR THE GENERAL POPULATION IN THE PROVINCE IS EXPECTED TO INCREASE FROM 2.7% IN 2000 TO 6.1% IN 2010.”

HIV/AIDS prevalence for the general population in the province is expected to increase from 2.7% in 2000 to 6.1% in 2010. HIV and Aids has replaced homicide as the leading cause of death in Cape Town due to the increase in HIV and Aids and a decrease in homicide, particularly firearm related homicide.

Significant progress is being made towards increasing the TB cure rate, i.e. 8% increase in the last five financial years, and although the national target of 85% is still not being achieved the current cure rate is the best in the country. The burden of disease is worsened by the conditions of poverty that plague many parts of the province.

While infant mortality rates have decreased in the Cape Town district from 25.2 per 1 000 live births in 2003 to 20.3 per 1 000 in 2007, there are huge differences in the sub-districts, with Khayelitsha having the highest rate of 30.2 per 1 000 live births in 2007, signifying the vast inequities in the province. The infant mortality rate in Khayelitsha has decreased from 42.1 per 1 000 live births in 2003.

Substance abuse increases the likelihood of mental disorders, violence, homicide, traffic accidents and childhood diseases. Drug-related crimes, for example, have grown at almost 35% per year for the period 2001/02 to 2006/07. Cardiovascular disease (CVD) affects all communities in the province, including poor communities. The Western Cape has a disproportionate burden of CVD compared to the rest of the country, due to rates of tobacco use, inactivity and numbers of overweight people much higher than the national averages for both adults and the youth. This will have consequences for the working population, health costs and productivity.

The cost per bed per day for CVD is estimated to be six times that of the average patient in a tertiary hospital and 10 to 15 times that of an average patient in a district or regional hospital, leading to severe financial implications for the health services of the province.

The policy document, the Reduction of the Burden of Disease, underlines and underpins the important role of all provincial departments in the delivery of a healthy and capable population. Healthcare 2010 is a strategy towards a responsive medical service prioritising primary-health care. The core function and responsibility of the Department of Health is to deliver a comprehensive

Table 9. Social indicators: Health, mortality and morbidity

<table>
<thead>
<tr>
<th></th>
<th>WESTERN CAPE</th>
<th>CAPE TOWN</th>
<th>WEST COAST</th>
<th>CAPE WINELANDS</th>
<th>OVERBERG</th>
<th>EDEN</th>
<th>CENTRAL KAROO</th>
</tr>
</thead>
<tbody>
<tr>
<td>TB cure rate</td>
<td>77.4%</td>
<td>76.6%</td>
<td>77.5%</td>
<td>77.4%</td>
<td>85.4%</td>
<td>80.2%</td>
<td>78.3%</td>
</tr>
<tr>
<td>HIV prevalence rate (2010)</td>
<td>6.1%</td>
<td>6.9%</td>
<td>4.3%</td>
<td>4.7%</td>
<td>4.9%</td>
<td>4.6%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Number of HIV/Aids-related deaths (2010)</td>
<td>42 879</td>
<td>41 306</td>
<td>807</td>
<td>1 136</td>
<td>3 108</td>
<td>106</td>
<td></td>
</tr>
<tr>
<td>Average Annual growth rate in drug-related crime (2001/2 – 2004/5)</td>
<td>34.3% [2001/2 – 2004/5]</td>
<td>28.1%</td>
<td>34.6%</td>
<td>29.5%</td>
<td>30.8%</td>
<td>40.1%</td>
<td>54.2%</td>
</tr>
</tbody>
</table>
package of health services to people in the province. This includes preventative, promotive, emergency and curative, rehabilitation and chronic care services. The department works towards the implementation of effective interventions to reduce morbidity and mortality particularly in the high priority areas of HIV/AIDS, TB, trauma and chronic diseases. Tertiary health care services are rendered to the people of other provinces, with this service largely funded through the National Tertiary Services Grant. In addition, the department also provides training facilities for health care workers and professionals in conjunction with the higher education institutions. The Department is also responsible for licensing and regulating private hospitals within the province and provides forensic pathology services.

**CASE STUDY**

**Focus on HIV/AIDS**

While HIV prevention is a priority for the Department of Health, the reduction of new infections remains a key challenge. The Province has 32 multi-sectoral teams (MSAT) that assemble relevant role players (including government, civil society and NGOs) to address the epidemic at a local level, with 558 MSAT projects, funded by the Global Fund, having been initiated to date. Furthering its community mobilisation approach, the department has trained 18,297 HIV/AIDS peer educators in the province. Post-exposure prophylaxis services for sexual assault are provided at 92.5% of hospitals and Voluntary Counselling and HIV Testing (VCT) is provided at 79.3% of the province’s fixed PHC facilities, which includes mobiles and satellites as well as at 52 non-medical sites.

The total number of clients tested for HIV was 353,959, of which 96,411 were antenatal patients. The prevention of mother-to-child transmission is the flagship prevention programme of the province and is made available at all health facilities that provide antenatal care services in the province. There has unfortunately been an increase of 4.2% per 1000 in the incidence of sexually transmitted infections (STIs) in 2008/09. Anti-retroviral Treatment (ART) therapy is provided at 66 sites in the province, with 54,703 patients being treated in the last year. Challenges around dealing with the HIV epidemic lie in recruiting and retaining appropriate staff, providing the infrastructure for the provision of services and maintaining adequate financial resources.

**Air quality and health**

Effects of air pollution on human health are dependent on both the duration of exposure and the concentration of the pollutant and certain groups of people are more susceptible to the effects of air pollution than others. The elderly and people with pre-existing lung and cardiovascular disease are sensitive to poor air quality. Children are more susceptible to polluted air because their respiratory systems are still developing, they breathe more air per kilogram of body weight than adults and they are more likely to be active outdoors. Pregnant women, athletes and those who play, work and exercise outdoors are even more susceptible to air pollution because they inhale pollutants deeper into their lungs on a frequent and continuous basis. Infants and foetuses are the most susceptible to air pollutants, particularly to lead.

The work being undertaken by the Department of Environmental Affairs and Tourism to address the causes of air pollution is therefore crucial in protecting the health of the Province’s citizens, particularly the more vulnerable groups as outlined above.
Commentary

INTEGRATING SUSTAINABILITY INTO HEALTH CARE

“When countries at the same level of economic development are compared, those where health care is organised around the tenets of primary health care produce a higher level of health for the same investment”.

– WORLD HEALTH ORGANISATION (WHO) WORLD HEALTH REPORT OF 2008

One of the motivating factors in the development of Healthcare 2010 was to address the issue of establishing a sustainable health care service that would provide ‘Equal access to quality health care.’ When it was developed it was recognised that failure to restructure the service would result in a service that would be neither affordable nor meet the service needs of the people. A key goal of Healthcare 2010 is to ensure that patients are treated at the level of care that is most appropriate to their need, thereby ensuring that the available resources are used optimally.

One of the underlying principles of Healthcare 2010 is the primary health care (PHC) approach, in terms of which the Department aspires to ensure the effective and efficient provision of equal access to quality comprehensive health care. This includes access to prevention, promotion, curative and rehabilitative care.

The Department has made significant progress in establishing the District Health System (DHS) as the delivery vehicle for primary health care. In this system each of the six districts has been divided into sub-districts with decentralised management to the district and sub-district level. Most of the 32 sub-districts in the province have a network of clinics, community day centres and/or community health centres and at least one district hospital or access to district hospital beds. The health workers are supported by home carers within the community-based services platform.

Once completely implemented, approximately 90% of all patient contacts should be effectively accommodated within the district health system. The need to increase capacity and competency at the sub-district level, and realising the commitment to the development and peer review for both managers and health care providers, presents a particular challenge. The Department has recently developed a clinical governance framework that aims to institutionalise the ongoing assessment and improvement of services and to inculcate an ethos of serving through caring.

The improved access to health care is illustrated by the increase from approximately 2 million primary health care headcounts in 1996/97, to approximately 15 million in 2008/09. The PHC expenditure per capita has increased from R199 in 2005/06 to R287 in 2008/09, an increase of approximately 44%. Further examples of the services provided by primary health care include: the full immunisation rate of children under one year of age now exceeds 90%; the antenatal coverage is over 85%; more than 90% of women delivery in health facilities; the TB cure rate is 77.4%; and 54,703 patients are on anti-retroviral treatment. During 2008/09, 20,751 patients commenced antiretroviral therapy.

As identified in Healthcare 2010, if the District Health System is effectively implemented, only about 8% of patient contacts will require specialist care at regional hospitals and only about 2% of patient contacts would require tertiary care. For example if a patient requires an uncomplicated caesarean section this could be performed significantly more cheaply at a district hospital than at a tertiary institution with the same outcome for both mother and infant. However, a patient with a complicated obstetric or medical history may require specialist care at a tertiary hospital when undergoing a caesarean section, which would therefore be the appropriate level of care for that patient.

A critical challenge is the reduction of the burden of disease. The WHO Commission on the Social Determinants of Health advocates addressing “causes of causes” to sustainably prevent disease. This requires addressing socio-economic inequity, reduction of poverty, improved housing, water and sanitation, and the social fabric of communities. The Western Cape Reduction of the Burden of Disease project is a project that aims to estimate the burden of disease and to promote an inter-sectoral approach to addressing this burden focusing on the “causes of causes”. Even though there has been some success in fostering inter-sectoral collaborations with other departments – such as Department of Economic Affairs and Tourism, Department of Social Development and the Department of Community Safety in addressing the burden of alcohol related trauma in particular – the institutional framework for inter-sectoral collaboration is weak and remains fragmented at an
3.3. GOAL III – Promoting ecologically sustainable development

‘Sustainable development will be achieved through implementing integrated governance systems that promote economic growth in a manner that contributes to greater social equity and that maintains the ongoing capacity of the natural environment to provide the ecological goods and services upon which socio-economic development depends.’

– THE WESTERN CAPE’S VISION FOR SUSTAINABLE DEVELOPMENT

3.3.1. OBJECTIVE 6 – Enhancing sustainable resource use

This section provides a review of the extent to which the iKapa GDS Objective of ‘enhancing sustainable resource use’ is being met through the Province’s policy and legislative activities. To provide greater specificity under this broad umbrella objective, the review focuses on the following thematic areas that were identified as part of the Western Cape Sustainable Development Conference, held in 2005, and that subsequently informed the recently developed Provincial Sustainable Development Implementation Plan (SDIP).\(^{35}\)

- climate change;
- sustainable energy;
- sustainable water use and management;
- sustainable waste management;
- sustainable air quality management;
- ecosystem services management and biodiversity; and
- coastal management.

The SDIP addresses the interdependence between natural resources, the economy and social development. It focuses on the need to change unsustainable patterns of consumption and production so as to deal with the challenges currently threatening our natural resource base, economy and social development advances, including for example water scarcity and pollution. Part of the challenge includes the need to ensure that rising household consumption is more equitable, financially sustainable and does not exceed natural limits. Underpinning the SDIP is the belief that creative and innovative approaches to more efficient resource use can contribute to employment, create assets, build skills and alleviate social problems linked to poverty and unsafe environments.

3.3.1.1. Climate change

Climate change represents one of the most significant challenges that the international community has had to deal with. While the Western Cape is a relatively low emitter of direct greenhouse gas emissions when compared to other parts of the country, through our use of coal-based electricity we nevertheless cause significant emissions elsewhere in the country.

Given our slow response, even with significant reductions in greenhouse gas emissions, we recognise that we are particularly vulnerable to some of the potentially significant impacts associated with climate change. These include, for example, changes in agricultural productivity, reduced availability of water, an increase in the number and intensity of extreme weather events and impacts associated with rising sea levels. The Western Cape’s key vulnerabilities are health, food security, biodiversity, water resources, fires and shifts in biomes. It is clear that a business-as-usual approach in the face of climate change is unsustainable and not in the best economic and financial interests of the Province. These changes will affect everyone in our community – government, industry, community groups and individuals, with low income communities being the most vulnerable to climate change – and all sections of the community have a part to play in responding to climate change.

The province has experienced a drastic increase in natural disasters...
during the past three years (Table 10) and the indications are that this trend will continue as the impacts of climate change take effect. The Department of Agriculture is responsible for the provision of technical assistance to land owners affected by these disasters and for risk prevention and reduction measures to mitigate the effects of future extreme climate events. An Agricultural Disaster Management Unit is currently being established to serve this function effectively. The effect of climate change on agriculture in the Western Cape will be one of the major determinants of the sector’s sustainability and competitiveness. Work is therefore underway to focus and support agricultural practices that will lead to climate change adaptation – including the choice of farming activity, the optimal use of natural resources (water and land), the promotion of conservation agricultural practises and the development of appropriate and sustainable technologies.

In response to the significant challenge that climate change presents, we have developed the Climate Change Strategy and Action Plan (CCSAP) for the Western Cape. The CCSAP has two channels:

- **adaptation** – preparing the province to adapt to the existing and potential impacts of climate change; and
- **mitigation** – reducing the intensity of climate change effects by reducing greenhouse gas emissions.

We recognise that to be effective, the strategy and action plan must result in climate risk being considered as a normal part of decision-making. Effectively, this means ‘mainstreaming’ climate change responses into other dimensions of strategic planning and risk management that are already in place. Prioritising response actions to climate change requires the identification of vulnerable systems (both natural and human) and the implications of these systems failing and the identification of the scope to reduce risks, strengthen adaptive capacity and realise potential benefits. Those vulnerable systems whose failure would have the most significant implications or that would have the largest chance of reducing their risks would be prioritized.

The following vulnerable systems have been identified as priorities for the climate change response strategy:

- **natural systems** – water, biodiversity, and coastal and marine systems and resources;
- **economic sectors** – agriculture, tourism and fisheries;

### Table 10. The extent of natural disaster damage in the Western Cape over the last three years

<table>
<thead>
<tr>
<th>DISASTER</th>
<th>DATE</th>
<th>FUNDS ALLOCATED</th>
<th>DAMAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eden floods</td>
<td>August 2006</td>
<td>R33 million over three years</td>
<td>550 farms affected</td>
</tr>
<tr>
<td>Haarlem Hail Disaster</td>
<td>November 2006</td>
<td>R9.2 million over three years</td>
<td>27 ha of orchards</td>
</tr>
<tr>
<td>Central Karoo drought</td>
<td>Since 2003 – select areas declared disaster areas in March 2005</td>
<td>R27 million</td>
<td>1 000 farmers (including 318 emerging farmers) received financial assistance to buy fodder for animals.</td>
</tr>
<tr>
<td>Central Karoo drought</td>
<td>Worsened significantly in the latter part of 2007</td>
<td>R20 million [but require further R37 million]</td>
<td>No natural vegetation in certain areas, exhausted planted pastures and fodder banks, marketable animals being sent to abattoir, sale of breeding stock to pay for farmers and labourers’ subsistence.</td>
</tr>
<tr>
<td>West Coast floods</td>
<td>June 2007</td>
<td>R9 million</td>
<td>R28.4 million – agricultural damages.</td>
</tr>
<tr>
<td>Eden floods</td>
<td>November 2007</td>
<td>Zero (R71 million requested from national DoA)</td>
<td>R180 million – agricultural damages.</td>
</tr>
<tr>
<td>Boland and Overberg floods</td>
<td>November 2008</td>
<td>Area not yet declared disaster area</td>
<td>R800 million – agricultural damages R250 million – required for riverbank erosion protection work.</td>
</tr>
</tbody>
</table>
- economic resources and infrastructure – energy, transport, health and air quality; and
- the built environment, livelihoods and disasters – social systems, extreme events (floods, fires).

While the CCSAP outlines various strategies and actions for climate change mitigation and adaptation (see Box 4), many of these are currently still aspirational. We are, however, already implementing various programmes that will contribute to mitigating climate change; many of these are outlined in more detail in the sub-section on sustainable energy below. These programmes are focused largely on promoting the use of renewable energy, and include the pilot rollout of solar water heaters, the development of a 70MW wind farm in St Helena Bay and the initiation of a wind energy resource assessment for the province.

We have established a Clean Development Mechanism desk that will highlight opportunities to gain credits through our greenhouse gas emissions programmes and projects. The Department of Transport and Public Works has developed and begun to implement a Public Transport Improvement Programme, which will greatly contribute to the reduction of emissions from vehicles. On the adaptation side, the Department of Agriculture has begun work and research to explore adapting crops to match with the effects of climate change.

The control of greenhouse gases is also addressed by the Provincial and Municipal Air Quality Management Plans. These plans focus on the industrial producers of these gases and, through the issuing of Air Emission Licences, can set appropriate emission reduction targets.

The action plan and response strategy is built on the following prioritised programmes:
- providing an integrated water supply and infrastructure management programme that integrates climate impacts and risks;
- establishing a focused climate change research and weather information programme;
- establishing clear links between land stewardship, livelihoods and the economy; and
- reducing the province’s carbon footprint through energy efficiency, development of renewable and alternate sustainable energy resources, effective waste management strategies and cleaner fuel programmes for households and transport.

The Department of Environmental Affairs and Development Planning is currently in the process of drafting Climate Change Adaptation and Mitigation Guidelines for the Western Cape, specifically aimed at helping those involved in decision making processes to incorporate climate change adaptation and mitigation measures into all strategies and operations.

To be effective, the strategy and priority programmes can only be implemented through a partnership approach with other government departments and bodies, research institutions, industry and community.

**Box 4 ADDRESSING CLIMATE CHANGE: OPTIONS FOR ADAPTATION AND MITIGATION**

The CCSAP provides for various options for adaptation and mitigation. These include:

- **Natural systems**
  - Managing water resources more efficiently by implementing the ecological reserve and developing more robust catchment models.
  - Protecting ecosystems and biodiversity through early prevention of invasive species, increasing protected areas and increasing the provincial fire management capacity.
  - Integrating climate risk considerations into coastal and general development planning.

- **Agricultural sector**
  - Implementing strategies to increase resilience and reduce the vulnerability of agriculture including through integrated land care management, research on pests and microbes that are particularly sensitive to climate change, research on cultivars that are capable of handling temperature increases and drought, and more efficient irrigation for water conservation.

- **Tourism sector**
  - Factoring climate risks into development planning and approval processes in the industry and researching the socio-economic impacts of climate change on tourism.

- **Economic resources and infrastructure**
  - Factoring climate risks into the Western Cape’s energy planning, strengthening the province’s energy security through diversifying its supply base using renewable resources, and maximising opportunities in the growing solar water heating industry.

- **Transport sector**
  - Introducing cleaner fuel programmes in the provincial fuel mix, developing an integrated, efficient and safe public transport system; and taking greater efforts to encourage innovation in the province, such as the development of South Africa’s first ‘home-grown’ electric car currently being developed in Cape Town.
3.3.1.2. Sustainable Energy

‘The Western Cape has a secure supply of quality, reliable, clean and safe energy, which delivers social, economic and environmental benefits to the province’s citizens, while also addressing the climate change challenges facing the region and the eradication of energy poverty.’

– THE 2014 SUSTAINABLE ENERGY VISION FOR THE WESTERN CAPE

The Western Cape accounts for 10% of South Africa’s total energy demand and is dependant on fossil fuels and nuclear power for most of its energy needs. We acknowledge the high energy consumption per GDP output in the province and recognise that demand is expected to grow to 375 million GJ unless energy consumption patterns change significantly. The reliance on fossil fuels and high consumption lead to increased prices and a high carbon footprint and challenge the province’s development efforts. The current breakdown of energy consumption by sector and by fuel type is provided below.

Given that petrol and diesel use constitute 54% of the fuel use types, it is clear that the transport sector has a very important and strategic role to play in sustainability policy and in addressing climate change and mitigation.

We have recently finalised the Draft White Paper on Sustainable Energy for the Western Cape Province, which seeks to move the Western Cape towards more sustainable energy production and use. Once approved, the White paper will form the base of the Western Cape Sustainable Energy Facilitation Bill to be developed by the end of 2009.

The White Paper comprises six goals clustered into three key themes:

SOCIAL SUSTAINABILITY

- Alleviate energy poverty – though reducing inefficient energy appliances, large scale fires caused by the use of paraffin stoves in unsafe conditions, the cost of preparing meals and heating homes and the time spent accessing energy.
- Improve the health of the nation
- Improve both the indoor and outdoor climate through reducing the atmospheric emissions of noxious substances.

ENVIRONMENTAL SUSTAINABILITY

- Reduce harmful emissions – reduce GHG emissions and combat climate change through improved energy efficiency, public transport and increased use of renewable energy, making use of available finance mechanisms such as CDM.
- Reduce negative footprints on our environment – through reducing the use of fossil fuels by switching to cleaner technologies and energy efficient practices.

ECONOMIC SUSTAINABILITY

- Enhance energy security – through improved energy efficiency (reducing demand), improved supply of sustainable energy and reduced individual demand.
- Improve economic competitiveness – by improving industrial and commercial energy efficiency and using this as an export marketing tool.

To achieve these goals, five broad strategic objectives and associated action plans have been identified and are scheduled to be implemented over a three-year cycle across different provincial departments and external organisations:

1 LEADERSHIP THROUGH ACTION

Under the objective, energy efficiency and renewable energy principles and objectives have been integrated into the relevant Provincial planning frameworks (SDIP, PSDF, MEDS and LEDS) and a legislative framework and action team has been established to support sustainable energy. Means of funding clean energy programmes through the use of provincial budgets are being explored and future plans are being established to map the implementation of energy savings and efficiency programmes across the province. Support is being provided to municipalities to develop and implement energy strategies / local energy plans and capacity building is being undertaken with industry, NGOs and other stakeholders.
2 BUILDING EFFECTIVE PARTNERSHIPS
Building partnerships is key to the implementation of the sustainable energy strategy, with focus being placed on shared working across the Province’s departments, sharing knowledge with other provincial governments, gaining the support of national government departments, supporting local government in the development of local energy plans and working in collaboration with identified sectoral groupings.

3 STIMULATING THE MARKET
This objective focuses on buildings, clean energy supply and residential energy efficiency. The potential for using solar and wind energy for providing the province’s energy supply is high. While the use of solar for heating water as well as power generation is readily available and commercially viable, the establishment of local manufacturing capacity for other renewable energies would need to be supported. We are working with industry to develop guidelines for energy efficient design, with environmental impact assessments (EIAs) for certain developments already including conditions for energy-efficient design options. Energy efficiency has, where this could be done within capital budget limitations, been integrated into the designs of the new Khayelitsha and Mitchells Plain Hospitals that are soon to be commissioned. Budgeting processes need to be developed further to allow for the inclusion of considerations such as total life span energy and environmental costing.

Energy efficiency implementation will be promoted through a range of interventions including industrial and building energy management, energy audits to identify energy saving measures that can be implemented in a cost effective manner, the promotion of norms, standards and labelling of energy use, certification and accreditation of professionals and communication, education and awareness campaigns. To raise awareness regarding energy efficiency, the Department of the Premier arranged an Energy Embizo in March 2008, and our Departments of Education and Environmental Affairs and Development Planning ran a schools climate change education workshop.

4 IMPLEMENTING FINANCIAL MECHANISMS
This objective will be realised through the Clean Development Mechanism (CDM) desk for the Western Cape. The desk provides information and support for potential CDM projects in the public sector, and will facilitate baseline monitoring and link smaller government projects to create projects suited to the CDM. We are also exploring establishing a comprehensive energy-funding plan with the input of local and international energy finance experts.

4 SUPPORTING LOCAL GOVERNMENT
Local government support will be provided through the establishment of an energy forum, where groups of experts will be able to provide guidance on focus areas or initiatives. The Province will also facilitate the removal of legal and financial barriers currently preventing the uptake of renewable energy and support the development of required capacity to engage with renewable energy markets. Energy poverty initiatives will be co-ordinated with local governments.

Box 5 – PROPOSED ENERGY TARGETS FOR THE WESTERN CAPE

A reduction in overall energy efficiency against business as usual scenario of 15% by 2014:

- Industry energy efficiency improved by 20% by 2014
- Residential energy efficiency improved by 10% by 2014
- Commercial and public buildings energy efficiency improved by 11% by 2014
- Transport energy efficiency: 12% by 2014

Carbon emissions are to be reduced by 10% by 2014 measured against the 2000 emissions levels. This target can only be achieved through the realisation of both the renewable energy target as well as the energy efficiency target.

15% of the electricity consumed in the Western Cape will come from renewable energy sources in 2014, measured against the 2006 provincial energy consumption. Renewable energy purchased by Provincial Government: 10% by 2010. People living in informal settlements and RDP houses have a 30% reduced energy poverty measured as access to and costs of energy services by 2014.
Case Study

Solar water heaters

Due to the energy crisis recently experienced in the Western Cape, local authorities are starting to explore the compulsory installation of solar water heaters in certain buildings. A pilot project for installing solar water heaters in the Western Cape was set up to demonstrate the reliability of SWHs and to raise awareness around the benefits of receiving free energy from the sun, not only for the environment but also improving the quality of the lives of the energy poor.

Phase one of the project involved 184 houses in the Kwanokuthula township in Riversdale, with the second phase being focused on homes in Elsies River, Nyanga and Atlantis. A third phase will be completed by the end of the financial year and will be implemented in Outshoorn, Prince Albert and Mossel Bay. The installed SWHs are working very well in Kwanokuthula and for the first time the residents have hot water on tap. This has greatly improved their quality of lives. The project in Hessequa was done in collaboration with the Hessequa Municipality.

Renewable energy

The Province, together with the Saldanha Municipality, Seeland Development Trust, Oxfam UK and Genesis Eco-Energy are developing a 70MW wind farm in St Helena Bay. While the project is still in the planning phase, it would aim to demonstrate:

- A commercially viable enterprise that develops and champions new models of ownership for wind farms in South Africa;
- National and Provincial energy programmes that enhance economic empowerment by ensuring the community owns a significant share of the project;
- A project that aims to address the objectives of the provincial environmental economy;
- A programme on sustainable energy strategy objectives; and
- The utilisation of the clean development mechanism of the United Nations Framework Convention on Climate Change to deliver benefits to the project and its stakeholders.

Powering a computer laboratory with the sun’s energy

The WCED’s Khanya Project, which has installed over 30 000 computers in 920 schools thus far, launched a pilot project in August 2008 to provide a solar-powered computer laboratory at Bernadino Heights Secondary in Kraaifontein. Khanya has proved the viability of a solar laboratory, with the next step being to develop a more affordable model.

Commentary

Integrating Sustainability in Provincial Energy Initiatives

While we have done well to develop a draft White Paper on Sustainable Energy for the province, we recognise that there is scope for more direct engagement with provincial departments, such as the Department of Economic Development and Tourism to realise certain elements of the strategy, such as promoting markets for renewable energies. Additionally, to ‘walk the talk’ and promote action by external stakeholders, we will need to be prepared to commit to implementing a number of the above initiatives in our own facilities.

Early in 2008, in response to the power cuts, the Energy Risk Management Committee (ERMC), which was formed in 2005 with the first round of power cuts, was re-installed. In 2005/2006, drives through the committee achieved savings of 500MW by appealing to the public, business, and organisations to reduce their electricity consumption. Out of the ERMC, a Provincial Monitoring Team (PMT) was formed, chaired by a representative from the Cape Town Business Chambers. It was at these meetings that Eskom developed their communication plan for a public power conservation plan. This then became a national programme, with the National Energy Response Team (NERT) taking over the role of the PMT at a national level.

Past experience has shown that when a crisis hits, we establish the necessary task teams and committees. We need to establish formal structures to implement the sustainable energy strategy in its entirety, not only in moments of crisis.
Commentary

INTEGRATING SUSTAINABILITY INTO PROVINCIAL WATER INITIATIVES

Since water is one of the most threatened resources we have in the province, clearly we have a long way to go before our water management systems can be considered adequate for our needs. To some degree, it will be impossible to put water management on a sound footing before some of our other core functions have managed to improve their own operations. We need to provide support to local authorities to ensure that waste water treatment standards are properly observed, and that difficulties regarding water quality monitoring systems are resolved. A more co-ordinated approach to water management is a promising development, but we have yet to prove that we can make the best of these arrangements.

An important challenge is to ensure that water constraints are considered in all local and Provincial Government strategies, plans, programmes and budgets. For example, the education sector needs to improve water efficiency and consider alternative supplies of water in the education centres and schools that it manages. Similarly, service delivery in the health sector is closely linked to water, with access to water and sanitation impacting on general health in the province. When planning health services, such as the two new hospitals being constructed in the Cape Town region, water-efficient equipment and systems should therefore be incorporated into the design specifications.

A co-ordinated water strategy shared by national, provincial and local government is essential to ensure efficient and effective implementation of the iKapa GDS. In line with government’s commitment to integrated planning and service delivery, the Department of the Premier has partnered with DWAF to ensure that water is a priority item on the strategic agenda of all sector departments. A partnership was established with DWAF through the alignment of the draft Water Sector Plan with the goals and objectives of the iKapa GDS. Although this has been achieved, linking planning between DWAF and provincial departments remains a challenge. There have been delays in getting certain collaborative projects off the ground. Issues regarding increasingly poor water quality in the province – following difficulties regarding waste water treatment and the enforcement of water quality monitoring – need to be addressed.

The partnership between DWAF and Province will advance in the next financial year through a number of engagements with sector departments and local government. This should ensure that there is sustained communication between provincial departments on water issues. Furthermore, the partnership will aim to utilise intergovernmental relations forums – such as the Premier’s Co-ordinating Forum and District Co-ordinating Forums – to discuss and reach agreement on the manner in which to achieve water savings at a systemic level in local authorities, and how to ensure that municipalities budget for the maintenance and upgrading of water service delivery systems.

“AN IMPORTANT CHALLENGE IS TO ENSURE THAT WATER CONSTRAINTS ARE CONSIDERED IN ALL LOCAL AND PROVINCIAL GOVERNMENT STRATEGIES, PLANS, PROGRAMMES AND BUDGETS.”
maintenance at local government level is completely inadequate.

Current budgets for infrastructure maintenance, upgrading and expansion do not include provision for potential flood damage – yet these extreme weather events have occurred with increasing regularity over the last decade [Table 10, pg46]. We are currently investigating whether the extent of flood devastation could be mitigated through improved storm water drainage, as well as the enforcement of building and farming restrictions in areas that lie below the flood line. The regularity with which floods have occurred in the Western Cape over the past decade also suggests that there is a need for an urgent review of the 1-in-50 year flood line. Responsibility for carrying the cost of flood damage lies with national or provincial governments if the area is declared a disaster area. National or provincial governments therefore have the incentive to review the standards and specifications for infrastructure in areas prone to flood damage.

**CASE STUDY**

### Use of satellite technology to assess water efficiency

Agriculture uses more than 50% of the water in the province and it is therefore very important that this water be used as efficiently as possible. The Agricultural Water Conservation Programme was started in 1999 to monitor existing water use and to provide technical information and support to producers to increase their water use efficiency (kilograms of crop produced per cubic meter of water). Presently, these monitoring and technology transfers are taking place in Stellenbosch (plums), Worcester (wine grapes), De Doorns (table grapes), Ceres (pears), Vredendal (wine grapes) and the Sandveld (potatoes). The project has reduced actual irrigation water used by between 15% and 25%.

The monitoring and field measurements for these projects are labour intensive and costly, and a more efficient method to determine water use efficiency had to be found. Satellite imagery was explored as an alternative during a pilot project that we launched in 2006/7 to gather information on the water use efficiency of wine and table grapes in some of the areas mentioned above. The results of this project – lead by the Department of Agriculture – were then compared to actual field measurements collected over a couple of years. The results obtained with the pilot project proved to be accurate and will allow similar water use studies in the near future. The next project, with the Department of Water Affairs (DWAF) and the Cape Action Plan for People and the Environment (CAPE) as partners, will be to determine the water use efficiency of potato farming in the Sandveld area of the West Coast. The project will also use satellite imagery to determine the impact of the farming activities (potatoes and rooibos tea) on the biodiversity of the area.

### Schools water efficiency

The Department of Environmental Affairs and Development Planning implemented a pilot project to explore the issue of water efficiency in schools (excluding irrigation systems). Three schools, all with hostels, had their water systems retrofitted. The costs of retrofitting the three schools amounted to R18 270, with average annual annual savings of R3806 – ranging between R1262 and R6100 – being realised across the three schools. The average pay back period was two years but ranged between four months and four years, nine months.

The project is small but will at least enable the Province to gather baseline data to understand the value of the initiative. Monitoring for one year preceding and subsequent to the retrofits indicates that the systems have led to a 15%–34% saving of water. Initial calculations indicate that the systems have led to a 25%–30% saving of water. Province plans to use the project across its departments to raise awareness of the costs and benefits of water efficiency purchasing and has retrofitted a further 11 schools in the Khayelitsha and Mitchells Plan areas. Water conservation awareness has not yet been promoted, as the first step was to test the effectiveness of the fittings. While there has been an overall saving in the pilot schools, it has been difficult to assess the consistency of savings due to, for example, the occasional use of hostels over the holidays. A challenge to the project, not yet overcome, is vandalism at schools that cannot be closely monitored due to their remoteness. The schools involved in the pilot project were keen to be part of the initiative and have begun to see its value.

**“THE WESTERN CAPE FACES A NUMBER OF WASTE CHALLENGES INCLUDING ILLEGAL DUMPING, NON-PAYMENT OF MUNICIPAL LEVIES FOR WASTE DISPOSAL, A SHORTAGE OF ‘AIR SPACE’ IN MAJOR LANDFILL SITES AND THE RISING COSTS OF MANAGING WASTE COLLECTION AND DISPOSAL.”**

#### 3.3.1.4. Sustainable waste management

The Western Cape faces a number of waste challenges including illegal dumping, non-payment of municipal levies for waste disposal, a shortage of ‘air space’ in major landfill sites and the rising costs of managing waste collection and disposal. Additionally, the poverty crisis has led to ‘scavenging’ for waste on landfill sites, a hazardous and degrading life style. There is potential value in waste streams through recycling and related activities. It is now largely accepted that the answer to waste management issues is integrated waste management through pollution prevention and waste minimisation at source, managing the impact of the pollution and waste on the receiving environments, and remediating damaged environments.14
Promoting integrated waste management plans

In accordance with the National Waste Management Strategy for South Africa 1999, we have requested all municipalities to develop integrated waste management plans (IWMPs), outlining how materials will be managed from point of generation to point of disposal.

These plans should:
- identify and plan for future waste management needs and requirements;
- minimise waste at source;
- manage the impact of waste on the receiving environment;
- remediate damaged environments; and
- involve all stakeholders in the process.

To facilitate the creation of the IWMPs, we ran capacity-building workshops in five districts and municipalities. Despite these efforts, many of the local governments faced significant obstacles in the development of their IWMPs. Facing a shortage of appropriately skilled personnel, consultants were often commissioned to develop the IWMPs, resulting in costly processes and the development of plans that had limited ownership by municipalities, often contributing to a shortage of funds to develop and implement the IWMPs.

To counter these obstacles, we drew up a guideline document and checklists and ran numerous workshops to assist municipalities in the development of their IWMPs. An IWM Forum for the Western Cape was also established to provide for further capacity building, information sharing, technical advice and co-operative governance.

The IWMPs have now been assessed, and reports submitted to municipalities. A monitoring and evaluation system is being established to be used by municipalities and the Province to evaluate the implementation of their IWMPs. Work still needs to be done to ensure that the IWMPs form an integral part of local governments’ Integrated Development Plans.

Facilitating improved baseline data

Many of the integrated waste management plans submitted by municipalities lack sufficient baseline information, bringing into question the appropriateness and effectiveness of the IWMPs. Waste characterisation surveys were therefore conducted at selected waste disposal facilities with the intention of: improving the quality of information on the various waste streams; establishing the potential monetary and calorific value of the waste streams and their recycling and energy-use potential; and improving waste management planning at all spheres of government.

The results of the waste characterisation surveys indicate that packaging material dominates around 65% of the waste stream at provincial waste disposal facilities. This highlights the benefits of developing legislation that advocates extended producer responsibility aimed at encouraging the upstream removal of packaging waste. The results will also provide an indication of the feasibility of landfill mining, which prolong the life of existing landfill facilities, provide a vehicle for sustainable job creation and help stimulate the recycling economy of the Western Cape. The results of the calorific value and energy content calculations indicate that waste-to-energy and waste incineration initiatives are only viable in certain areas. The high capital costs associated with these initiatives make the option of material recovery more feasible. The results of the surveys point to the need for closer investigation to exploit what appear to be significant economic opportunities.

Stimulating the recycling economy

In response to the landfill crisis and in an attempt to stimulate economic growth through the development of the Environmental Goods and Services sector, the department embarked on a strategy to stimulate the recycling economy. A study of recycling in the province was conducted in 2006 and a status quo report inclusive of a strategy and action plans to stimulate this economy was developed. The focus of the strategy is on securing the supply of recyclables, while stimulating the market for recycled products. Recycling initiatives involving the collection and sorting of recyclables offer an opportunity to provide employment for the poor. One arm of the strategy focuses on skills development and training in recycling for waste sorters and collectors, particularly in the Province’s SOPA (state of the Province address) social transformation priority areas. The training programme includes efficient waste identification, sorting methods, an entrepreneurial
skills module and value-adding processing of waste. The programme aims to create new avenues beyond the mainstream markets for recyclables and to equip waste collectors with sufficient skills to improve their operations and move away from a survivalist mindset and become more formalized.

We have supported municipalities through reviews of their waste streams to identify recycling potential and the calorific value of waste for possible waste to energy initiatives. We also ran five recycling workshops across the province (one in each district municipality), to which municipal officials, recyclers, processors, collectors, various provincial departments and industry were invited. These workshops created platforms for various role players to collectively address the issues that hamper recycling. Networks were established to link entrepreneurs with municipal officials, various provincial officials, recycling industry representatives and potential funding partners in the rural Western Cape districts. A recycling summit is planned for the new financial year in which all role players in this sector will be invited to present best practice and innovative concepts around recycling.

We have collated and distributed a brochure of waste processors in the Western Cape and have developed a database of collectors and sorters of recyclables to further support the creation of networks between the different groups. The department has also implemented a “buy recycled” public awareness and marketing campaign by launching a recycled products catalogue and exhibition in 2008. The catalogue is in the process of being placed on the departmental website and will be updated annually to accommodate new developments in this sector. The “buy recycled” campaign will be extended into the new financial year where further engagements with the public will take place.

Another important arm of the strategy is to engage with industry around the introduction of recycled content in their manufacturing processes where feasible. An industrial sector involved in the manufacturing of one of the priority waste types will be targeted for this purpose.

### CASE STUDY

**Waste Management in Education (WAME)**

The Waste Management in Education (WAME) programme brought the concept of integrated waste management into the foundation and intermediate phases of the school curriculum – covering all eight learning areas, including subjects such as maths, social science, languages – with the idea that learners would spread the message to their families and communities. WAME has now been running for four years and has been introduced to all non-Metro Education Management Development Centres (EMDCs) in the Western Cape. The City of Cape Town has also adopted the programme, which is currently being introduced to educators in the Cape Metropolitan Area.

The training workshops have been well received by educators and the next step is to develop an evaluation tool and system to ensure that the project is achieving its objective of improving public awareness on waste related issues. The evaluation will also assess whether accessible support structures exist to drive waste related projects and whether projects extend beyond the classroom to the broader community. To address the challenge of ensuring that educators stay enthused about the programme, refresher workshops and activities will be provided.

**Cleanest Town Competition**

The Cleanest Town Competition initiative was launched in June 2001 by DEAT and has been actively supported by the Province. The aims of the competition are to improve the profile of waste management, to encourage communities to take pride in and realise the benefits of a clean environment, to encourage waste minimisation practices and to encourage the separation of waste at source and recycling, to encourage partnerships between municipalities, waste contractors and businesses, to encourage the maintenance of a cleaner and healthier environment by publicly recognising municipalities that are exceptionally clean and have sustainable systems in place to manage their environment, to encourage the enhancement of South Africa’s image to all tourists, and to encourage the development of the Recycling Economy.

Out of 24 municipalities 20 entered the competition in 2008. The winners of the 2008 competition were Breede River Winelands, Swartland (first runner up), Overstrand (second runner up) and Stellenbosch (most improved). The Provincial winner progresses to the national competition and the Western Cape has had winners at the national level for the last two years. There has definitely been an improvement in the quality of entries, with an appreciation for integrated waste management and a real effort being made, particularly in some township areas. While the initiative seems to be working in terms of the message of waste getting through, the challenge to the programme is that to make a real impact, significant investment is required to provide proper capacity and infrastructure.

**Chemical Management Action Plan (CMAP)**

The Chemical Management Action Plan is a voluntary programme that was set up to help businesses to improve their chemicals management. The programme was initiated out of Rio Agenda 21, which called for safer chemical management. Selected sectors participated in workshops to develop generic industry guidelines in 2003. After undertaking a status quo assessment of chemical management practices, CMAP was established and sector specific guidelines were developed. In 2008, the programme was rolled out to facilities and each business was requested to develop its own action plan and identify its short, medium and long-term priorities.

Businesses are supported through the provision of on-site guidance on what they should be managing and guidance material is then sent to companies. CMAP was initially only offered to a small group based in Cape Town, to which 40 companies signed up. By the cut-off date...
There are various challenges to the programme that need to be addressed:

- Businesses lack the capacity to develop their action plans;
- The guidelines are possibly too complex and might need to be simplified to help businesses understand the key issues more easily;
- A number of businesses have other systems in place (such as ISO14 001) and still need to understand that these can be strengthened by the development of their action plan; and
- Business representatives attending the workshops are often not the decision makers or budget holders, which affects the development of the action plans.

We recognise that we need to engage with industry associations and organisations to encourage the take-up of CMAP by their members, with training and support being provided to companies through these associations. A monitoring and evaluation system for CMAP still needs to be developed, which will be done in co-ordination with industry.

### CASE STUDY

#### Worm farm project

A worm farm project is currently being planned which will be linked to the Green Goal (2010) programme. The project will be implemented early in 2009 and will involve setting up the daily collection of food waste, possibly by bicycle, from tourism-related businesses such as restaurants and hotels. The waste will be composted and either sold or provided to urban agriculture projects.

The Cape Town Partnership\(^5\), of which the Province is a partner, is already getting businesses to separate out recyclables and have created their own recycling site and jobs. They have given their support to the establishment of a wormery and already have the logistics in place to work with the project. The Province’s role will be focused on helping the initiative to become established as a business – not just for 2010, but long term and ongoing.

#### 3.3.1.5. Sustainable Air Quality Management

Air quality in South Africa is governed by the National Environmental: Air Quality Management Act (NEM: AQA) [39 of 2004]. The National Framework for Air Quality Management describes the Western Cape as having good air quality except for the following areas:

- West Coast District Municipality – poor air quality;
- City of Cape Town – poor air quality;
- Cape Winelands District Municipality – poor air quality; and
- Eden District Municipality – potentially poor air quality.

Various measures have been taken to better understand air quality within the province which include: ambient air quality monitoring, maintenance of an emissions inventory, development of air quality management plans, the management of scheduled processes and the establishment of a Provincial Air Quality Officers’ Forum. These are explored in further detail below.

#### Ambient air quality monitoring

The Provincial Air Quality Management Department monitors ambient air quality at three stations located in Vredenberg, Mossel Bay and Paarl, while the City of Cape Town has 12 monitoring stations within their jurisdictional area. These stations monitor particulate matter, Nitrous Oxides, Sulphur Dioxide, Ozone and Volatile Organic Compounds. Each of these stations has a meteorological station, recording all meteorological data. The provision and analysis of the monitoring data facilitates the air quality Management planning process.

#### The emissions inventory

The Provincial Air Quality Management Department manages an inventory of industries and other activities that emit various pollutants into the atmosphere and the City of Cape Town has an extensive emissions inventory for industries with listed processes within its jurisdictional area, which is verified and updated regularly. These processes are controlled in terms of licences that set parameters for emissions into the atmosphere.

#### Air quality management planning

The NEM: AQA prescribes that each municipality as well as the Provincial department draft an Air Quality Management Plan to address the management of air quality throughout the province. The City of Cape Town, the Eden District Municipality and the Cape Winelands District Municipality have completed their air quality management plans. These plans are included in the municipalities’ Integrated Development Plans (IDPs), where they are allocated financial and human resources. The Provincial Air Quality Management Plan is currently being drafted.

#### The management (licensing) of listed activities

Activities that are listed in Schedule 2 of the Atmospheric Pollution Prevention Act (APPMA) [45 of 1965] require a Registration Certificate which sets conditions for the emissions to the atmosphere by the activities in question. While the Registration Certificates are currently administered by the national Department of Environmental Affairs,
this function will be taken over by the District and Metropolitan Municipalities, who will issue Air Emission Licences as of September 2009. A review of the current certificates is focused on the iron and steel industry, the petrochemical industry, the cement manufacturing industry and the fish meal processing industry.

The Provincial Air Quality Officers’ Forum
This forum enables air quality officers from the municipalities in the Western Cape to co-ordinate and monitor the progress of their activities and to build capacity.

3.3.1.6. Ecosystem Services Management and Biodiversity
The conservation of biodiversity and ecosystem services – on which social and economic systems depend – is particularly pertinent in the Western Cape, which is internationally renowned for its biodiversity. The province is home to two of the world’s 34 global biodiversity hotspots: the Cape Floristic Region (shared with the Eastern Cape) and the Succulent Karoo biome (shared with the Northern Cape and southern Namibia). The Cape Floristic Region is also one of only six world plant kingdoms, key elements of which have recently been approved as a serial world natural heritage site under the World Heritage Convention.

There are a number of significant challenges associated with managing biodiversity and ecosystem services in the province.

These include:

- providing for the intrinsic value of biodiversity in policy development processes, and clearly demonstrating the link between biodiversity and socio-economic development;
- addressing the loss and fragmentation of natural habitat, associated in particular with increasing agriculture and urban development;
- managing the invasion of alien species;
- appropriately managing the vital role that fires play in the health of fynbos ecosystems;
- maintaining corridors of intact natural habitat between the coast and the mountains and along mountain ranges, to assist species to respond to climate change;
- ensuring sustainable management of the harvesting of plant products from the wild;
- mainstreaming biodiversity priorities in sectors whose core business is not biodiversity management;
- developing public-private-partnerships, as well as interventions and partnerships that serve both conservation and development goals; and
- adequately funding CapeNature, the Provincial agency responsible for biodiversity conservation and management.

Managing biodiversity in the province
Within the Western Cape, South African National Parks (SANParks) is responsible for managing national parks, and CapeNature – which falls under the Department of Environmental Affairs and Development Planning (DEA&DP) – is responsible for managing provincial conservation areas, including wilderness areas such as the Cederberg. CapeNature is also responsible for protecting biodiversity throughout the province outside formally protected areas, including the protection of natural systems and ecological processes. CapeNature’s goal is to ensure that by 2020 the biodiversity of the Western Cape is conserved, sustainably utilised and effectively managed to deliver economic benefits to the people of the region in a way that is embraced by local communities.

CapeNature manages biodiversity through systematic conservation planning and a wide range of other initiatives referred to below:

Scientific services and professional advice – This includes the provision of biodiversity research; conservation planning, state of biodiversity reporting; inputs to national policy and legislation; development of provincial guidelines, policy and legislation; and developing and maintaining the Biodiversity Information Management System and implementing, as a key partner, the international and national biodiversity programmes, such as C.A.P.E, SKEP and STEP.

Land-use planning and decision-making – CapeNature works to ensure effective land-use planning and management on both a reactive basis (by reviewing development applications) and a proactive basis (through forward-planning initiatives such as SDFs and IDPs). As a result of capacity constraints, CapeNature has tended to focus on reactive input. It is acknowledged, however, that closer working with other partner organisations is required to enable the capacity for more proactive work and to be able to track the impact of work undertaken. A staff member has been seconded from SANBI to the Province to assist us to integrate bioregional planning for select priority areas into an overall provincial plan.

Conservation stewardship – The Stewardship Programme, run by CapeNature in collaboration with numerous other provincial departments, NGOs, business associations and municipalities, was developed to expand the Protected Areas Network of the Western Cape, allowing for the protection of biodiversity and ecosystem services on private land and acting as one of the means to implement the Western Cape Climate Change Strategy and Action Plan.

Fire management – This involves fire prevention, protection, suppression and data management. A Fire Management Data Project has been developed that involves the establishment of a database of the fire history in the protected areas of the Western Cape, identifying trends related to amongst others the frequency, seasonality and intensity of fire to
provide recommendations regarding any required changes in fire management policy.

- **Management of invasive alien plants (IAP)** – An invasive alien vegetation policy and strategy was completed in 2006/7, guiding the development of strategic IAP maps and future clearing. CapeNature exceeded its annual target of clearing 122 233ha in 2006/7 by 9% (109% of target area cleared), and cleared 97% of the increased 2007/8 target of 139 818ha.

- **Conservation management** in Protected Areas, Marine Protected Areas and areas outside the ‘formal’ protected area network, with efforts made more effective through partnerships.

- **Youth development.**

- **Local economic development** – including Working for Water, Working on Fire, Working for Wetlands, Baboon Monitoring, CoastCare and Community Bade Natural Resource Management.

- **Biodiversity crime and legislative compliance.**

- **On the policy side of things, the development of** Payment for Watershed Services (PWS) in the Berg Water Management Area (WMA) has also been proposed. Watershed services can be described as a flow of valuable services that the natural watershed system provides to society. It is envisaged that PWS would enhance water security through better land management. 

  While monitoring and knowledge management of biodiversity has focused on the reserve level, CapeNature has recently moved towards being more strategic in this regard. This involves implementing a biodiversity monitoring system that has been developed by CapeNature, and which is aligned with that of Cape Action for People and the Environment (CAPE) and a web-based performance management system that is being developed to allow field workers to report regularly on their progress towards targets.

CapeNature is currently considering the development of either a Western Cape Biodiversity Strategy and Action Plan or a biodiversity framework that would inform biodiversity priorities in the province and would be aligned to the CAPE strategy, the Succulent Karoo Ecosystem Programme (SKEP) and Sub Tropical Ecosystem Programme (STEP). The biodiversity framework developed would inform the work that the Province undertakes and would be integrated into both provincial and municipal spatial development frameworks.

CapeNature provides significant services to the protection of biodiversity, which is currently being reviewed to assess whether strategies are on track and where challenges need to be addressed. Currently, CapeNature and the biodiversity function within DEA&DP work as two separate organisations or functions, with the former being responsible for policy development and providing inputs into national biodiversity legislation. The option of combining these two functions is currently being explored.

“**CAPENATURE PROVIDES SIGNIFICANT SERVICES TO THE PROTECTION OF BIODIVERSITY, WHICH IS CURRENTLY BEING REVIEWED TO ASSESS WHETHER STRATEGIES ARE ON TRACK AND WHERE CHALLENGES NEED TO BE ADDRESSED.**”

**CASE STUDY**

- **Emerging farmers sign biodiversity agreement with CapeNature**

  In June 2008, a new black empowerment company comprising 116 third generation farm workers on the Romansrivier estate in the Breedekloof, Fynbos Vrugte en Wyn Boerdery signed the first community biodiversity agreement facilitated by CapeNature. The voluntary agreement is binding on both parties for the next 15 years and means that the 40 hectare site will be managed to protect critically endangered species, including Breede Alluvium Fynbos vegetation and the geometric tortoise.

- **CapeNature’s Stewardship Programme**

  Beyond ensuring that privately owned areas with high biodiversity value receive secure conservation status, the programme ensures that:

  - this land is linked to a network of other conservation areas in the landscape;
  - landowners who commit their property to a stewardship option will benefit from their conservation actions;
  - good biodiversity management practice on privately owned land is promoted through empowering private landowners to make good land management decisions; and
  - the combined goals of sustainable development, biodiversity conservation and social upliftment are accomplished in the area.

  The success of the Stewardship Programme, which has involved contracts being concluded with landowners since 2005, is evidenced through the fact that 29 Contract Nature Reserves, 16 Biodiversity Agreements and 18 Voluntary Conservation Areas have been established thus far, with the total hectares newly conserved totalling 74 533ha. The mechanism is now also being implemented by other Provinces and is being adopted as a National Programme by DEAT.71
3.3.1.7. Coastal Management

The Western Cape Province, with over 1,000km of coastline, stretches from the Olifants River in the north, to the Blaaukrantz River in the east, and is home to over one tenth of the national population. The province’s coastal environment is characterised by unique, diverse and beautiful natural habitats, as well as a wide variety of communities and industries from all sectors of the economy, which are dependent on coastal resources for their livelihoods.

The Western Cape Coast is being damaged by inappropriate and insensitive siting of development, disregard for dynamic natural coastal processes, unsustainable resource utilization, poaching of fishing and marine resources, pollution from land-based sources, destruction of dunes systems, and the introduction of invasive and alien species plant and animal species. Unless sensitive, holistic and integrated coastal management takes place, these habitats and livelihoods will be degraded and destroyed, with the very attributes that make the coastal zone attractive being lost.

Key challenges associated with improving the sustainability of the coast include:
- ensuring the definition of roles and responsibilities for coastal management are clearly defined;
- having sufficient capacity and resources to perform this function;
- ensuring effective assessment of the sensitivity of coastal ecosystems;
- maintaining clear delineation of the coastal zone, and developing and implementing regulations to prevent further inappropriate development; and
- allowing for public access along the coastline.

The National Environmental Management Act: Integrated Coastal Management Act requires the preparation of a Coastal Management Programme (CMP) for each of the coastal provinces. The CMP functions as a planning and policy instrument, whilst simultaneously controlling undesirable development. The Western Cape Coastal Management Programme has been prepared in accordance with the requirements of national legislation, and builds on the policy statements presented in the Coastal Zone Policy for the Western Cape (March 2003). It presents a vision for coastal management in the province, and defines a set of coastal management principles, objectives and strategies to achieve these objectives.

This CMP provides a clear direction for ensuring due care and management of the Western Cape coast, with the successful achievement of CMP objectives contributing towards sustainable utilisation of coastal resources. Together with the Coastal Zone Policy, the Western Cape CMP will promote integrated planning and management of the coastal zone.

TOWARDS IMPLEMENTATION OF THE COASTAL MANAGEMENT PROGRAMME

A phased strategic approach will be needed to implement the CMP. The key implementing agency will be the DEA&DP, in co-operation with the Provincial Coastal Committee and district and local authorities. The Provincial Coastal Committee – established in 2002 – includes the interests of all strategic level coastal management stakeholders and serves as an advisory forum to coastal managers. Prioritisation of objectives to be focused on, and the strategies to be implemented, is crucial to the success or failure of the programme. In addition to a long-term strategic focus, there is a need to focus on critical issues requiring urgent attention, and to select strategies that can demonstrate progress or tangible results in the short term. Priority ratings have been assigned to the strategies based on the input of workshop participants and specialist expertise. Public comment may result in some changes to the priority ratings.

The CMP covers five themes:
- Governance and capacity building – The governance component includes ensuring the management and expansion of the Western Cape Provincial Coastal (PCC) Committee, supporting the Regional Coastal Committee (RCC), providing an advisory role for the District and Local Municipalities in respect of coastal management issues and developing terms of reference regarding Municipal Coastal Management Programmes. The capacity building component includes contributing to coastal management education and public awareness in the province through select events, such as National Marine Week and International Coastal Cleanup and through exhibitions and the media.

- National asset – Raising awareness among all coastal zone users of their rights and responsibilities with regards to access to the coast including co-ordinating off road vehicle workshops and monitoring and evaluating boat-launching sites in the province.

- Coastal planning and development – alleviating coastal poverty through initiatives such as the provision of Sustainable Coastal Livelihoods training courses and workshops for coastal decision makers and providing input into the permitting of offroad vehicles.

- Natural resource management – providing training to coastal managers, decision makers and coastal stakeholders in the province on coastal management topics such as coastal system processes, legislation and coastal policy, co-operative governance, integrated coastal management, sustainable coastal development and other related coastal management issues.

- Pollution control and waste management – providing support and participating in the National Programme of Action for the Protection of the Marine Environment from Land-Based Activities.
Current indications are that strategies related to institutional strengthening, clarification of roles and responsibilities, education and capacity building, improved planning, prevention of inappropriate development, and law enforcement and compliance will be priority areas for attention.

**CASE STUDY**

**Mariculture and aquaculture economic sector**

There are various initiatives at national and provincial level underway to explore and unlock opportunities in the mariculture and aquaculture sector. It is crucial that alternate livelihoods strategies be identified to address the decline in fish stocks, changing and migration patterns of fish species, and the global increase in fishing. The National Department of Economic Development and Tourism is in the process of establishing a ‘Special Purpose Vehicle’ (SPV) to drive the aquaculture sector in the province. The Province’s Department of Environmental Affairs and Development Planning; Coastal Management, is a member of the Technical Task Team. The SPV will be a section 21 company which will consist of various government departments, the Provincial Development Committee and stakeholders in the industry.

“THE WCPSDF IS BASED ON THE PRINCIPLES OF BIOREGIONAL PLANNING: LAND-USE PLANNING AND MANAGEMENT THAT PROMOTES SUSTAINABLE DEVELOPMENT. IT IS A LONG-TERM AND BROAD-SCALE PLANNING INSTRUMENT THAT IS TO BE REVIEWED EVERY FIVE YEARS.”

3.4. **GOAL IV - Fostering greater spatial integration**

Past political dispensations, entrenched poverty, the high cost of land in urban areas and planning legislation have led to a situation of segregated living, largely along income and racial lines. Less affluent people tend to live on the urban edges, in areas far from employment and often relatively inaccessible to public transport. The situation needs to change, so that we can move towards a truly integrated society and balance out the cost of living and accessibility of jobs for all. While it is recognised that municipalities have a key role to play in this regard, this section focuses on a review of the Province’s activities relating to the promotion of greater spatial integration and the development of an effective public and non-motorised transport system.

**3.1.4. OBJECTIVE 7 – Ensuring greater spatial integration**

Historical approaches to spatial and development planning within the province have resulted in a number of significant continuing challenges:

- increasing income, asset and spatial inequalities between rich and poor with increasing concentration of wealth among a small minority;
- perpetuating apartheid spatial planning patterns that entrench race and class divisions in the province’s urban settlements;
- deteriorating urban functioning, with the poorest living furthest from areas of opportunity without viable public transport systems;
- limited access to social services for the poor;
- decreasing public access to the coast as it is increasingly privatised for the wealthy;
- the destruction of natural habitat, leading to loss of ecosystem services such as natural purification of water supplies and creation of drainage systems, moderation of floods, droughts and temperature extremes, generation and renewal of soil fertility, prevention of soil erosion and nutrient cycling, and the absorption of greenhouse gases;
- the lack of opportunities for the growth of small or medium enterprises; and
- poor quality of education and health, housing backlogs and high unemployment levels.

Recognising these challenges, a Western Cape Provincial Spatial Development Framework (WCPSDF) was compiled in 2005 to provide an integrated and effective approach to social, economic and environmental planning, both for the Province and for local government. The WCPSDF also aims to help prioritise and align investment and infrastructure plans of other provincial departments, as well as those of national departments and parastatals related to the Province. It seeks to provide clear signals to the private sector about desired development directions and specifics on ‘no go’, ‘maybe’ and ‘go’ areas for development, as well as redress the spatial legacy of apartheid.

To perform this function effectively, the WCPSDF considers the inter-related systems of the built, socio-economic and biophysical environment:

- The WCPSDF is based on the principles of bioregional planning: land-use planning and management that promotes sustainable development. It is a long-term and broad-scale planning instrument that is to be reviewed every five years. It has not yet been formally approved and is currently a policy document that does not create or take away rights to use land. The WCPSDF does, however, provide clear guidance as to the allocation and use of land rights with the aim of moving towards a more equitable and sustainable society. As a central policy document in the Provincial Government, it is envisaged that district and local government bodies should refine or develop their SDFs to align with the WCPSDF.
Three key areas of intervention have been identified in the WCPSDF:

1 **Socio-Economic Development**
   - Improving quality of life and addressing poverty
   
   - The five supporting objectives are:
     - to align the future settlement pattern of the province with economic potential and the location of environmental resources;
     - to deliver human development and basic need programmes wherever they may be required, as far as possible through existing facilities, particularly those that are underutilized;
     - to strategically invest scarce public sector resources where they will generate the highest socio-economic returns;
     - to support land reform by lowering the barriers to entry for participants in agricultural land reform projects through identifying suitable land for land reform, valuing land at market rates based on commercial rather than speculative returns and supporting family and co-operative farming; and
     - to conserve and strengthen the sense of place of important natural, cultural and productive landscapes, artifacts and buildings.

2 **Settlement Restructuring**
   - Reducing spatial discrimination and efficiencies
   
   - The supporting objectives are:
     - to end the apartheid structure of urban settlements, through prohibiting further outward expansions of urban settlements that result in urban sprawl, moving towards densification, promoting socio-economic integration and mixed use development, requiring that portions of privately owned developments should be set aside for the provision of inclusionary housing, and using publicly owned land to spatially integrate urban areas and to give access to informal economy operators in formal economy spaces; and
     - to locate urban activities in convenient areas and promote public and non-motorised transport through densifying urban settlements, focusing development on areas with highest accessibility, judging accessibility in terms of walking distance, restructuring road networks to promote economic activity in appropriate locations, and clustering community facilities together with commercial, transport, informal sector and other activities so as to maximise their convenience, safety and social and economic potential.

3 **Environmental Sustainability**
   - Ensuring sufficient environmental capital for future generations
   
   - The supporting objectives are:
     - to protect biodiversity and agricultural resources; and
     - to minimise the consumption of scarce environmental resources, particularly water, fuel, building materials, mineral resources, electricity and land.

The WCSDF was amended during 2007/2008 and associated guideline documents were prepared which relate to settlement restructuring, inclusionary housing and rural planning and management. These guidelines should be completed by early 2009. A manual on climate change is being developed. During the 2008/2009 financial year, municipalities received R1.71 million to assist with the compilation of their Municipal Spatial Development Frameworks (SDFs) and their alignment with the WCSDF. The Western Cape Biosphere Reserve Bill was aligned with the draft Planning and Development Amendment Bill and is currently being finalised.

**Improving the EIA Process to Promote Sustainability**

After 14 years of democracy, 12 years of legislated Integrated Development Planning, and a decade of compulsory Environmental Impact Assessment (EIA), in South Africa and the Western Cape, we find ourselves confronted with the harsh reality that poverty remains widespread and persists alongside affluence; inequalities are growing; spatial restructuring and urban integration remain major challenges; and our life-supporting ecosystems are deteriorating at an alarming rate – all of which undermines the growth and development potential of the Western Cape. While development is therefore desperately needed, the type and form of development and the location of the development are key considerations. In this regard the Western Cape Provincial Spatial Development Framework and Municipal IDPs and SDFs play a vital role in providing the planning context for project-level EIA decision-making. EIA is the legislated tool used to ensure that
negative ecological and socio-economic impacts associated with developments are prevented, mitigated and managed, while positive impacts are enhanced and managed – to ensure that ultimately we are moving closer to reaching our shared growth and integrated, sustainable development goals.

**To assist in promoting sustainable development, the following should be considered in EIAs:**

- Financial viability constitutes both the economic development opportunities as well as the broader societal short-term and long-term needs – as reflected in the IDP, SDF and EMF for the area, and as determined by the EIA.
- The imperative for economic growth and job creation for South Africa cannot be denied, but must, according to the Constitution be “justifiable economic development” – contributing to environmental and social justice.
- In addition, “justified” economic growth should not result in significant opportunity costs, and should result in the “best practicable environmental option” being implemented – the consumption of resources should address inequality, improve integration of segregated communities and address societal priorities.
- EIAs must be objectives-led and in this regard should determine the impact that the development will have on the specific goals, objectives and targets set for a specific area – which should be contained in the IDP, SDF and EMF for the larger area.

Unfortunately EIAs are often approached within a vacuum, with project level impacts not measured against the strategic context provided by the planning for the area. As such, EIAs are often not objectives-led and are seen as a hindrance and barrier to development. EIAs have not been adequately mainstreamed into the way of doing business. EIAs, therefore, are often done on an ad hoc basis and too late in the bigger project planning and development process. Consequently, the focus is often only on meeting the minimum legislative requirements rather than on improved environmental performance and the exploration of more sustainable alternatives, which would help achieve the specific vision, goals and needs of a particular area.

The Province is participating in the current national initiative to explore ways of improving the efficiency and effectiveness of EIA in South Africa. In an effort to facilitate the shift to a more proactive and strategic approach to EIAs, a Development Facilitation Unit has recently been established within the DEA&DP to assist with the identification of barriers, constraints and challenges to the achievement of sustainable development and service delivery. In addition, the unit will contribute to the search for solutions to overcoming the challenges, while contributing to the process of identifying and maximising opportunities for shared growth and integrated, sustainable development. We work closely with municipalities to assess whether they are preparing forward looking plans and have a vision for their areas, and whether their planning serves to integrate development in the area. They have the challenge of competing for developments to create jobs and gain revenue – in the process often compromising the vision for their communities. Our role is to work with them so that they can engage proactively with developers and be consistent in the conditions of development. To this end, Environmental Management Frameworks (EMF) have been developed as a new, pre proactive and strategic environmental management tool. EMFs are currently being developed for the City of Cape Town, Drakenstein Municipality and the Sandveld area in the West Coast District Municipality. The idea is that ultimately EMFs will be incorporated into spatial development frameworks of Municipalities.

**We are working proactively with industry on a number of fronts:**

- Proactive programmes are being run by the C.A.P.E. Greater Cedarberg Biodiversity Corridor Initiative with the potato and rooibos tea agricultural industry in the Sandveld. These engagements were initially ad hoc, but have now been formed into a best practice initiative with EIA and environmental management guidelines just being published. A pilot will be run with 20 farmers from each farming industry (20 rooibos and 20 potato).
- With regards to wind energy, we have developed a methodology for how to strategically identify areas for wind farms. This creates more certainty for investors.
- We have produced guidelines regarding how government reviews impact assessments, how to do specialist assessments and assess the need and desirability for a proposed development (development of alternatives) and outlining the procedural requirements for EIAs. Capacity building workshops are also regularly held.
- While the WCPSDF provides an indication to developers and investors of the risks associated with development proposals, we are also encouraging businesses wanting to invest in certain property or development projects to check with the DEA&DP beforehand to get an indication of the associated risks.

\[
\text{THE PROVINCE IS PARTICIPATING IN THE CURRENT NATIONAL INITIATIVE TO EXPLORE WAYS OF IMPROVING THE EFFICIENCY AND EFFECTIVENESS OF EIA IN SOUTH AFRICA.}
\]
3.4.2. OBJECTIVE 8 – Developing an effective public and non-motorised transport system

The efficient movement of people, goods and services is essential to the economic success of the Western Cape, particularly given the separation of residential and working areas and the value of exports and imports moving through the economic system.

While transport as a sector currently contributes less than 10% to the economy, there are more than 300,000 commuter movements into the centre of the City of Cape Town through private (65%) and public (35%) transport every day. Current transport challenges include traffic congestion, high numbers of accidents, significant time and money spent getting to work, vehicle over-crowding, crime on public transport, and significant emissions affecting both air quality and climate change.

These issues need to be addressed through the establishment of an integrated and efficient land-based transport system involving:
- improved public transport;
- promoting cycling or walking;
- encouraging more travel-efficient behaviour, such as car pooling, working from home; and
- using more efficient, less polluting vehicles.

The first key step is moving commuters from private to public transport. With a significant shift, sufficient demand will be created to justify increased government spending on public transport systems. This will provide improved systems for people who live on the periphery of cities and town to be able to access work opportunities and more affordable transport for all. With an improved public transport system, people will spend less time and money travelling, freeing up time to be more productive on other activities. Transport offers major empowerment opportunities, and will improve and facilitate urban and rural movement, thereby empowering communities in more remote areas.

The Province recognises that there is still a long way to go in achieving the vision of a holistic and fully functional public transport system. As a start to addressing this gap, the Department of Transport and Public Works facilitated the development and publishing of our Public Transport Improvement Plan in 2008. The improvement of the province’s public transport system will require partnerships between the Provincial Government and civil society, local government bodies, funders and public and private enterprise. The Department of Transport and Public Works is currently assisting all municipalities in the Western Cape to review their Integrated Transport Plans with the intention of promoting integrated public transport, improved mobility and non-motorised transport.

The key elements of the Public Transport Improvement Plan include:
- integrating the different forms of public transport run by various operators into a seamless system that works smoothly;
- creating a secure, reliable public transport system protected from crime;
- addressing the safety of vehicles;
and driving behaviour to reduce the number of accidents;
- training operators in the transport industry so that they are motivated to maintain their vehicles, provide a reliable and safe service and care for their customers; and
- providing infrastructure such as bicycle and pedestrian pathways and facilities that cater for people with special needs.

Our public transport improvement plan is focused on four key areas outlined below.

PEOPLE
The approach and activities planned to improve the quality and effectiveness of the rail- and road-based transport and related include:
- making the public transport modes work better together through co-ordinating route and mode planning (trains, buses, minibus taxis) to ensure a transport network that covers all areas, co-ordinating different operators to run more effectively and efficiently, implementing a uniform fare policy and fare management, developing effective interchange facilities (e.g. park and ride) and providing up-to-date public transport information;
- improving passenger service through increasing the service coverage of the transport system, providing public transport outside of peak hours, increasing the frequency of service and thereby reducing waiting times, ensuring journeys are safe and comfortable, and introducing a system of performance based contracts for transport operators;
- ensuring a safe trip through providing a dedicated law enforcement team to public transport, increasing visible security on public transport, providing secure parking at stations and plan access routes and design facilities to maximise safety;
- ensuring a safe ride by promoting advanced driver training, enforcing road worthiness, recapitalising the public transport vehicle fleet and making use of traffic-calming options;
- empowering and supporting operators by providing business training, facilitating public-private partnership deals and business opportunities for previously disadvantaged groups, negotiating contracts with current operators for specific routes, and promoting the formation of private transport companies and co-operatives; and
- supporting effective operations and improving the infrastructure through building secure transport nodes that look good and function effectively, installing dedicated right of way infrastructure where appropriate, and making it easy for pedestrians and cyclists to get to public transport stops and for cyclists to be able to store their bikes safely at stations.

PLACES
The approach and activities planned to improve land use and sustainability include:
- co-ordinating land use and transport planning more effectively through incorporating transport planning into mixed land use planning and human settlements planning, designing and implementing interchanges that need to be built or modified to serve commuters in the best way and making public transport impact assessments compulsory for all developments;
- promoting sustainable transport to protect the environment by prioritising public and non-motorised transport over the use of private transport, promoting and later regulating the use of clean fuel and public transport vehicles with clean fuel or low emissions, supporting the move towards densifying human settlements to reduce the distances travelled and regulating traffic flow;
- making social upliftment and integration a priority through prioritising public transport improvements in low-income areas and providing safe and functional multi-purpose spaces as part of the public transport system; and
- launching the transport precinct development framework in November 2008; the Philippi node has been selected as the first attempt at the development of an integrated transport node. The site was selected due to the Kosovo Housing project being located there, the Philippi Stadium being upgraded and a large retail chain planning to establish a store there. The work on the Philippi node is being undertaken in partnership with the City of Cape Town.

POLICIES
The approach and activities planned to improve institutional structures, funding and policy include:
- developing structures that work more efficiently to ensure the delivery of effective and co-ordinated public transport services through establishing co-ordinating planning bodies and an intergovernmental transport operating body, building capacity with regard to technical transport experts and ensuring transfer of skills from transport consultants to public officials;
- securing funding to build and maintain an effective public transport system;
- developing legislation and policy that enables effective planning and operating of public transport; and
- integrating and co-ordinating all stakeholders through establishing a transport workstream in the Province and community forums and ensuring effective public participation processes.

PERCEPTIONS
The approach and activities planned to improve user perception through awareness and marketing include:
- promoting and marketing public transport;
- involving communities and passengers in planning; and
- providing user-friendly information.
3.5. GOAL V - Ensuring effective governance and institutional strengthening

“We are increasingly seeing that we can’t compartmentalise these issues... we can’t look at economic sustainability without considering environmental sustainability. When we hear about sustainable development, we understand that as environmental sustainability. As a Province, we should be striving for growth that is sustainable in every aspect.”

– PROVINCIAL TREASURY EMPLOYEE

The final, critical element of sustainability is that of governance. Without effective governance and strong institutions, it is impossible to realise any of the goals and objectives relating to the economic, social and environmental elements of sustainable development. In this section we review some of the recent governance activities relating specifically to sustainability, focusing on those elements not already addressed above.
3.5.1. OBJECTIVE 9 – Building effective governance institutions

3.5.1.1. The current state of sustainability governance

We recognise that sustainability considerations should be mainstreamed into all policy, planning and decision-making processes across the province. The principles of sustainability should be seen not as separate from our current work, but rather as integral to how we carry out our core functions. For example, instead of deciding whether or not the provision of housing is a priority or not, we should be considering how we provide for housing needs within the constraints of the natural environment.

We have stated in the iKapa GDS that to facilitate a government pursuing shared growth and integrated development, we have to work in a coherent, collaborative and focused manner. This approach has already begun to change the way that Provincial departments work and leads the way in illustrating how sustainability can be mainstreamed into the work that we do. Currently, many of our policy activities on sustainability issues are undertaken in silos, with each department focusing on separate elements of sustainability and with different projects at times conflicting with the sustainability principles and activities of other departments. This not only affects our efforts to promote sustainable development, but also impacts on the effective implementation of all of our core functions. Without effective integration across departments, we increase the potential of duplication of work, resulting in wasted human and financial resources, conflicts between the objectives of different projects and confusion among our stakeholders. An example of why sustainable development needs to be pursued inter-departmentally can be seen in dealing with the impacts of climate change on agriculture. As agricultural vulnerability increases due to climate change, both pressure on water supplies and job losses on farms are likely to increase. As a result, migration to cities and subsequent incidence of disease are likely to increase. To address the situation, living conditions and health care need to be improved, poverty needs to be reduced, water resources need to be managed and agricultural impacts need to be addressed. These functions are covered by different departments, highlighting the need for inter-departmental working. 73

The principles of sustainability are still viewed by many as an add-on ‘project’ to the core functions of the Province. The notion of sustainability relating to how we do our work, as opposed to simply what work we do, has not yet been sufficiently ingrained in our culture. Due to the urgent responses that have been required to address certain crises over the past few years – such as the energy and water shortages – the issue of sustainable development has come to be viewed by some as a piecemeal and crisis response activity rather than a long-term, all encompassing agenda.

While the implementation of sustainability should be the responsibility of all departments, we recognise that one department or body should ideally drive the mindset shift and overall monitoring of progress; this is currently not the case. The recently completed Sustainable Development Implementation Plan (SDIP) has proposed a set of governance structures and has outlined various responsibilities for the implementation of sustainability across the Province. Should these institutional arrangements be implemented, this will go some way to ensuring more effective co-ordination across departments. Many of our sustainability initiatives are currently being driven by DEA&DP; while they certainly have a key role to play in implementing this agenda across the Province, they currently lack the full mandate to do so, and suffer capacity and budgetary constraints that impede the ability to scale up sustainability-related pilot projects.

This sustainable development report has begun to spell out the Provincial sustainability principles and strategies, and to review how these align with existing Provincial strategies. We recognise that we need to identify and address potential conflicts between the sustainability elements within the various Provincial strategies and policies, and that appropriate institutional arrangements need to be established to ensure effective co-ordination and integration of sustainability considerations within all levels of government and other relevant organisations. As a part of this, we are committed to establishing reliable and transparent reporting, monitoring and evaluation systems. 74 All stakeholders need to understand and commit to the principles of transparency, access to information, accountability, shared responsibility and empowered participation.

“...WE RECOGNISE THAT ONE DEPARTMENT OR BODY SHOULD IDEALLY DRIVE THE MINDSET SHIFT AND OVERALL MONITORING OF PROGRESS.”

3.1.5.2. Introducing governance structures to ensure co-ordination of sustainability

While various existing governance structures could be used to review selected policies and to track the performance of the Province on sustainability issues, one governance structure is needed to ensure accountability of the overall implementation of sustainability. It is anticipated that a Sustainability Working Committee will be established with accountability for implementing sustainability throughout the Province’s core functions. Given that the sustainability agenda affects every department’s responsibilities, we are exploring the option of these co-ordinating governance structures being
housed within the Department of the Premier. The lead department will assign responsibilities to other departments or organisations in negotiation with them and will take responsibility for these parties implementing their actions. This will be facilitated through the provision of support for departments to start integrating sustainability into their functions and through regular feedback sessions with all departments.

To further ensure successful implementation, the responsibilities of each department will be built into the targets of their Annual Performance Plans, which are reported on at the Standing Committee. The Standing Committee holds departments accountable to these performance plans. Sustainability indicators will also be included in the Provincial Monitoring and Evaluation Programme, which tracks data trends and assesses whether certain indicators are improving or deteriorating. In addition to this, it is proposed that senior ranking individuals – such as heads of departments and/or MECs – will be identified within each department to drive the sustainability agenda forward. Their sustainability-specific responsibilities will be included in their key performance indicators, and MECs will be held to account on their sustainability-related responsibilities by MinMec.

It has been proposed that task teams be established to review the Provincial policies and strategies for sustainability, and to identify and review potentially conflicting objectives. The role of these task teams would include the provision of guidance notes regarding the integration of sustainability principles for future policy and strategy development. The Provincial Treasury also has a critical role to play in ensuring the alignment of policy with strategy, through its budget process and in particular through the Annual Performance Plan and Medium-Term Expenditure Framework (MTEF) assessments.

Sections 16 to 23 of the Intergovernmental Relations Framework Act enable the premier to establish technical support teams as necessary to achieve the objectives of the Act. In addition, the premier and provincial cabinet meet regularly to review policy and strategy and to monitor implementation. The director-general, as the highest Provincial administrative official, engages with government officials from senior management service to municipal managers and the executive management of the 30 municipalities. In addition, Provincial top management is the locus of integration transversally within the Province for the co-ordination of intergovernmental relations and intra-departmental co-operation. This provides a useful potential mechanism for co-ordination and integration.

Another means of ensuring co-ordination is through the Environmental Implementation Plan (EIP), required in terms of the National Environmental Management Act. This was intended to create alignment on environmental issues between the Province and the national government (the Department of Environmental Affairs and Tourism). In accordance with Section 3.11.7 of NEMA, this sustainable development report is to act as the Province’s EIP,
providing a co-ordinated view of the extent to which sustainable development is being implemented across Provincial departments.

The Western Cape provincial constitution provides for an Environmental Commissioner to be appointed. The role of the commissioner would be to serve as an ombudsman for environmental issues, with a broad remit to identify priority areas and to recommend programmes that should be established to address these areas. The Province has not yet appointed anyone to fulfil the role of the Environmental Commissioner as we are currently considering all options to hand regarding the governance aspects of sustainability.

We recognise that a system for collecting, managing and reporting data to assess the performance of the priority actions and targets as identified in the SDIP needs to be put in place to ensure that the sustainability agenda is being implemented and to enable the Province to publicly report its progress and challenges with regard to sustainability. The current reporting gaps – as measured against the Global Reporting Initiative (GRI) – are significant. We will use the GRI to guide our approach to sustainability and to establish systems for measuring our progress in this regard.

“IT HAS BEEN PROPOSED THAT TASK TEAMS BE ESTABLISHED TO REVIEW THE PROVINCIAL POLICIES AND STRATEGIES FOR SUSTAINABILITY, AND TO IDENTIFY AND REVIEW POTENTIALLY CONFLICTING OBJECTIVES.”

Case Study

Combating corruption

A Western Cape Anti-Corruption Forum has been established to encourage ethical behaviour and to end corruption in the Province. Successes to date include the management of 159 matters reported, 171 recommendations for disciplinary action, recovery of close to R74 million initiated, 13 matters reported to the police and 110 corrective measures implemented. Events such as the Anti-Fraud Awareness Day have helped to promote the Public Service Anti-Corruption Strategy, raising awareness of whistle blowing, the detection and prevention methodologies, and the Prevention and Combating of Corrupt Activities Act.

The Department of Local Government and Housing has responsibility for promoting anti-corruption and fraud prevention in local government. This is undertaken through the implementation of preventative as well as investigative measures. Preventative measures include the establishment of policy framework guidelines, the provision of support in developing anti-corruption strategies tailored to municipalities and good governance training. Thus far, 25 municipalities have draft anti-corruption policies and fraud prevention plans in place, the councils of 11 municipalities have adopted these policies and plans, and six municipalities have implemented their policies and plans. To address capacity constraints, we run train-the-trainer courses for each municipality and provide municipalities with materials to raise awareness of anti-corruption and fraud among their employees. All preventative work is undertaken in partnership with municipalities and involves a process of providing support and building of relationships.

On the investigative side, the Auditor General identifies areas of (potential) corruption and the Public Service Commission offers a national anti-corruption hotline, which is run by a third party. Corruption in government at any level can be reported anonymously and callers receive a reference number to be able to follow up on their calls. This national line removes duplication of provincial and municipal level hotlines and ensures objective and thorough call resolution. Calls are referred to the relevant Provincial Government whose responsibility it is to address. The Province will investigate and resolve the allegations and report back to the national hotline, which will assess whether issues are being properly dealt with. Increased awareness has led to a huge increase in calls to the hotline. The Public Service Commission publishes an annual report and meets with the Province to discuss challenges regarding how the Province deals with investigations and how the hotline collects and provides information.

We work with various relevant stakeholders in its anti-corruption efforts. There is close collaboration with the provincial Special Investigating Unit (SIU), to which the Province has also provided financial support to speed up investigations. As well as investigating individual cases, the SIU provides the Province with recommendations for preventing further corruption. In December 2008, the Province, in liaison with the Western Cape Anti-Corruption Forum, hosted the third Provincial Anti-Corruption Summit with the theme of ‘Integrity in Governance’. More than 500 delegates attended this forum from government, labour, business, civil society and law enforcement sectors. Two formal steering committees have been established in the province to deal with issues of corruption and fraud. These enable regular stakeholder engagement and reviews of processes followed and progress to date. The Province also attended the Thirteenth International Anti-Corruption Conference to share experiences and learn from other countries.
CHAPTER 4
PROGRESS REPORT 3 – Implementing sustainability in our internal operations

With most societies facing increasing pressures on limited natural resources, there are growing expectations on the public sector to lead by example, and to demonstrate sound environmental and social performance within its internal activities and operations.

While the previous section reviewed the extent to which sustainability principles have been integrated into the Province’s activities as government – through the implementation of its policy commitments and legislative functions – this section reviews the sustainability performance of the Province as an organisation: as the employer of more than 75 000 people, the owner of land and buildings, the manager of a fleet of vehicles, and a significant purchaser of goods and services.

This section is informed by the Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI), and by an assessment of what are deemed to be the most material issues for the purposes of external reporting. As this is the Province’s first sustainability report and many internal monitoring and reporting mechanisms are not yet fully in place, it has not been possible to provide full and accurate reporting against all of the pertinent reporting parameters. A review of the Province’s reporting against each of the GRI criteria is available from the Provincial website: www.capegateway.gov.za.

4.1 Environmental performance of our departments

Most of the Province’s internal environmental activities are co-ordinated and administered through the Provincial 2Wise2Waste enviro-efficiency programme, an initiative driven by the Department of Environmental Affairs and Development Planning (DEA&DP). A number of other environmental initiatives are run separately by the Department of Transport and Public Works (DT&PW).

The 2Wise2Waste programme started in 2002 as an office waste paper recycling and reuse programme, focused on the DEA&DP. The programme expanded in 2004 to take on a cleaner production approach that encompassed all elements of resource efficiency, reuse and recycling and disposal, including initiatives such as the recycling of paper, printer cartridges and mixed waste, the promotion of energy saving through switch-off campaigns, energy audits and efficiency improvements in employees’ homes, and the establishment of a water-wise and indigenous roof garden. While initially established as a programme focused on the Province’s internal operations, the programme has now extended to embedding elements of cleaner production in certain of the Province’s core functions. The 2Wise2Waste programme now acts as the umbrella programme for other projects that have come on stream, such as Green Procurement, the Recycling Economy, Waste Management in Education and the Cleanest Town competition (see below for further detail).

To promote the implementation of environmental efficiency across the departments, various initiatives have been undertaken in different departments.

These include the following:

- the programme was presented to heads of department at the top management meeting to achieve high-level approval for the programme;
- subsequently, departmental champions were appointed by each head of department and meetings were held to introduce the programme to these champions, capacitate them and ensure that the programme is rolled out to the various departments. These meetings are arranged every second month so that departments can report on their progress;
- staff surveys were run to raise awareness of environmental issues and to highlight the role of employees in reducing their footprint;
- marketing material is being
developed to assist the roll-out of the programme;
- monthly report-backs with floor champions are provided and regular floor visits are conducted and support provided where required;
- an Intranet page that will provide useful environmental information will be developed;
- a movie day to show ‘An Inconvenient Truth’ was hosted by a department;
- six education officials (from six districts) were sent to a conference where water and energy conservation and waste management were key messages; and
- a committee has been established to drive the programme.

The environmental performance of the different departments is mixed: while some have embraced the environmental agenda with enthusiasm and have been active in reducing their environmental footprints, others have not engaged in these initiatives. The activities and initiatives presented below have not been implemented across the board, but instead provide a broad indication of the types of initiatives that are being implemented by certain departments.

### 4.1.1. Encouraging energy efficiency

The Provincial Government, through the Department of Transport and Public Works, manages approximately 5,000 buildings, many of which use old technology and design. About 1,000 of these buildings have air conditioning, and around 50 of these have building management systems. Two energy audit programmes are currently being run across the Province, separately by DEA&DP and DT&PW. These have been streamlined to support each other, share best practice and undertake any retrofits as optimally as possible.

- The DEA&DP project involves the auditing of five provincial buildings. The audits will identify and analyse areas of heavy energy usage and provide recommendations on actions to improve the energy efficiency of the selected buildings. The audits will include capacity building to encourage employees to reduce energy usage through behaviour change and to assist those maintaining the buildings to continue monitoring their energy usage.
- The DT&PW has surveyed the use of existing building management systems and reviewed the water and electricity usage of 200 government sites, identifying potential savings for further examination. Examples have already been identified where buildings could achieve useful savings with the installation of energy efficient equipment, with payback periods of less than a year. It is anticipated that the lighting will be retrofitted, and activity sensors and solar geysers installed, in ten provincial buildings in the near future.

The recommendations from these audits will feed into the development of guidelines for energy efficient government buildings and will cover new building, retrofitting and renovations. Thus far, DT&PW have developed a concept note on improving energy efficiency and encompassing green building principles into the design and retrofit of provincial buildings. This concept note outlines plans to audit all provincial buildings, to cost energy efficient retrofits and the design and construction of new buildings, to develop and update norms and standards for green buildings, and to work with other departments to secure their commitment to green building principles. It is anticipated that a ‘Green Building Task Team’ will be established – comprising in-house architects, engineering and quantity surveying staff – to co-ordinate the Province’s green building activities. As far as is possible, all work will be undertaken in line with the Green Building Council of South Africa’s Green Star rating system.

These energy efficiency initiatives will be further supported through implementation of the green procurement policy being developed by Province (see page 71). This will be achieved through two of the proposed pilot areas of lighting and electronic and electrical equipment, as well as through formally supporting the energy efficient building design options currently being considered.

Individual departments have implemented various other energy reduction initiatives.

#### These include:
- running an internal email competition for individuals to calculate and disclose their personal carbon footprint;
- installing timers on electrical appliances and displaying switch off signs;
- decreasing the number of printers by linking PCs to central photocopiers;
- setting up video conferencing facilities;
- retrofitting select rooms with LED lights;
- opening windows rather than using air-conditioners;
- separating lighting and air conditioning circuits, enabling only those areas in use to be switched on;
- installing occupancy sensors; and
- designing audit guidelines enabling all departments to audit the energy usage of their buildings.

We are currently investigating various additional energy efficiency options. The feasibility of re-organising more of our offices to become open-plan is being assessed as a means of reducing general lighting, and experiments are underway with lighting levels in offices to assess the number of fluorescent lighting tubes actually required. Existing air-conditioning and heating practices are being reviewed with the aim of making them spot cooling rather than general cooling, and studies are being undertaken to review the acceptable ‘comfortable temperature’. Radiant heating is also being investigated. As lifts are responsible for a significant proportion of energy use in buildings,
we are investigating the installation of regeneration drives in lifts that are being refurbished. Ideas are also being explored to reduce the number of lifts operating at off-peak periods. DT&PW plans to make departments accountable for their utility bills to start to drive change. By having ownership of their utility bills, departments are more likely to push for more efficient practices and technologies.

4.1.2. Implementing waste minimisation initiatives

Various waste minimisation initiatives are being implemented by different individual departments.

These initiatives include:
- discouraging the use of multiple copies of documents at meetings and instead projecting the required information electronically;
- encouraging double-sided printing;
- including a message in email signatures that encourages the reader not to print the email;
- scanning and sending signed letters via email rather than hardcopy;
- separating recyclable materials;
- using recycled paper; and
- sending out-of-date magazines to communities.

Waste is currently being measured as the number of bins per day. Recognising that this is not an appropriate measure, we hope to implement a system for measuring kilograms of waste per person. We are currently exploring what data would be the most useful and how it could be collected. Within the DEA&DP, waste data has been collected since 2002. The department is currently trying to use the data to work out the amount of waste generated per person and to explain trends.

Materials from buildings being demolished or refurbished are reclaimed to be reused in other buildings. This practice is included in the policy documents for contractors. Recycled materials are also used for road building, with tar being chopped up from roads and pavements being demolished and reused in the making of new roads. We are planning to explore a number of other sustainable materials options, while taking into consideration how people use the building and how the building will be maintained. We are exploring options such as using FSC certified timber or Saligna, wool rather than plastic carpets, and calcium silicate bricks.

4.1.3. Promoting water efficiency

Recognising that our progress in implementing water efficiency measures can only be meaningfully assessed once accurate measurement systems are in place, we are seeking to reduce water usage throughout our facilities.

While some water efficiency initiatives have been implemented by different departments – such as introducing ‘switch-off’ water campaigns and replanting gardens to use water-wise planting and drip irrigation – these have not yet been widely implemented. The use of grey water and rainwater in education buildings has been investigated, but these are currently regarded as too capital-intensive and the department does not have sufficient funds.

The DT&PW is currently investigating the collection of rainwater and grey water at three pilot buildings. After water efficient technologies have been installed in these office buildings, they plan to focus on ‘event’ buildings, enabling awareness-raising of water-efficient measures among the public. The Department of Cultural Affairs and Sport hopes to address the challenge of making sports fields less water reliant; although Astroturf is less water reliant, it is too expensive for large scale rollout.

4.1.4. Managing the government fleet

We have a fleet of 4 000 Provincial vehicles that we manage and maintain. The fleet is not centralised and is instead permanently allocated to each department, with departments being charged for their service based on the kilometres driven. Cars are subject to regular maintenance, checked by our transport officers and good quality parts are used to ensure efficient running of the vehicles. Vehicles are required to go through thorough safety checks before being driven; this includes the checking of tyre pressure and tyre wear.

All cars are checked against a central fleet management system that tracks data such as distance, route, fuel efficiency and acceleration. This provides information on the condition of vehicles and driver behaviour and helps us prevent fraud. Incidents of poor or inefficient driver behaviour are highlighted to departments to deal with and focus is given to those departments with higher risk profiles. Monthly forums are held with departments to highlight operational issues such as driver behaviour and poor maintenance. All vehicles are fitted with electronic fueling devices that highlight excessive fuel consumption, which can then be investigated for fraud or inefficient driving. We are looking to establish an advanced drivers’ course where officials’ driving skills can be improved; this would include elements of driving so as to minimise fuel wastage.

We buy our vehicles through national contracts, with prices negotiated on behalf of all government bodies. We have investigated Liquified Petroleum Gas (LPG) vehicles, but the limited availability of servicing, maintenance

ROOFTOP GARDEN

A garden was established on the roof of one of the Provincial buildings in the centre of town with the objective of illustrating how gardens can be created in an urban environment and to encourage others to do the same. The garden contains only indigenous vegetation, uses furniture made from recycled products and displays art made from waste. It also acts as an insulator for the building. Groups will be invited to visit the garden for educational purposes.
and distribution remains a significant constraint. While we acknowledge that LPG vehicles are more economical, user-friendly and good for the environment, without the fuel industry being geared for LPG production, we are reluctant to go this route. The only other hybrid car available is the Toyota Prius, but this is still too costly for the Province to justify buying and the availability of servicing facilities is also a limitation.

We share information with other Provincial Government bodies through a co-ordinating committee. We have shown that managing our fleet in-house enables us to ensure that cars are well maintained and has reduced costs. We work with local government bodies to share our expertise and are to share our fleet management system with them without charge. We are currently exploring the option of moving to a centralised fleet, with vehicles shared across departments. This should reduce the non-utilisation of vehicles and unnecessary purchasing.

4.1.5. Developing a Green Procurement Policy

This year we drafted a Green Procurement Policy for the Province. This will be driven by the DEA&DP and Provincial Treasury and will soon be released for comment. We believe that effective green procurement measures – that consider the environmental and social consequences of product design, manufacture, distribution, use and disposal result – provide value for money across the full product life cycle.

The recently developed policy has the following objectives:

- decreasing the energy and resources we use and consequently reducing the negative environmental impacts;
- increasing the usability of spent products through reuse and recycling, thus promoting cleaner production and the minimisation of waste, as well as supporting the development of the recycling economy;
- promoting innovation and the development of products and services with a lower environmental footprint;
- utilising and disseminating environmental best practice in the areas of waste minimisation and management, water and energy efficiency and conservation, pollution reduction and socio-economic development;
- providing leadership to communities, businesses and suppliers by encouraging the use of environmental responsible products and services; and
- assisting employees to understand the impact of their consumption patterns and transfer their knowledge to their lives outside of work.

There are a number of barriers to fully implementing the policy, but we are working hard to address these as this has the potential to reduce our and our suppliers’ environmental footprint significantly and lead to more responsible spending of taxpayers’ money.
Public Works: Health

Public Works: Health has begun using various green building specifications – the City of Cape Town’s draft Green Building Guidelines, LEEDS (the US green guidelines) and the South African National Standards for energy efficiency in buildings (SANS 201–1:2008) – as a base for tender specifications for new hospitals to be commissioned. In addition to supporting the principles of the iKapa GDS, they are also working towards meeting the requirements of Eskom for compliance with the South African energy efficiency codes and best practice.

The department is currently focused on the energy efficiency agenda for new buildings, using capital budgets. The tenders for the Province’s two flagship projects – the new district hospitals being designed for Khayelitsha and Mitchell’s Plain – have included a request for green technologies. All ‘green’ technologies, however, will have to be designed to be within the existing capital budget. Solar power will be used for street lighting, but photovoltaic options are still regarded as being too expensive. Load shedding will be practised on non-essential loads. On the side of lighting, energy efficient and long lasting will be used, with the installation of light sensors, motion sensors and timers. Exterior lighting will also be minimized where not required – for example, removing uplighters that waste energy and cause light pollution.

There has been resistance to using grey-water due to health concerns in a ‘vulnerable’ environment and the use of rainwater for the hospitals’ water supply is considered unfeasible due to costs.

Rain water will, however, be used for landscaping purposes and heat pumps are being designed for this. The new hospitals will both be on public transport links and will have bicycle parks. At the Khayelitsha hospital, a food garden will be developed – by a German NGO working with the Province – to ensure a sustainable food supply for the hospital.

DT&PW has asked green experts to be innovative in their designs for new community health projects such as the clinic at Malmsberry and the ambulance clinic at Leeu Gamka. In the future, designers will be requested to design to green star level 5.

Table 11 – Implementation of 2Wise2Waste

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<thead>
<tr>
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<th>Energy</th>
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<td>Local Government and Housing</td>
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<td>Community Safety</td>
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Commentary

OUR ENVIRONMENTAL PERFORMANCE

It is evident that our flagship internal environmental initiative – the 2Wise2Waste programme – has not reached its full potential; a number of departments are not yet engaging in its activities (see Table 11). While behaviour change can largely take place with limited financial investment, implementing the programme across departments has been slower than anticipated. Mindsets still need to be changed and the business case for implementing 2Wise2Waste actions needs to be clearly presented to the different departments. Departmental champions have been identified in each department, but their active involvement in the programme varies across departments. Overcoming the challenges will require meeting regularly with the departmental champions to share experiences, information and challenges and plans are afoot for the 2Wise2Waste programme team to provide more hands-on training and support to each of the departments in the near future. A further challenge exists around the retrofitting of buildings that are not owned, but leased by the Province. The Province plans to identify the priority (high energy usage) buildings and engage in discussions regarding retrofitting with the landlords.

Planning is underway to monitor electricity accounts and recycling data to assess the effectiveness of the various initiatives underway and to identify where further support might be required. A survey was run across DEA&DP, which revealed that there is a good understanding of and buy-in to the 2Wise2Waste programme within the department. The survey will be rolled out across all departments early in 2009. At present, it is too early to provide data for the energy and water usage of the Province’s buildings, but we should be able to begin to measure energy savings figures within a year or so.

Given that most of the provincial buildings are fitted with old technology, the cost of retrofitting these buildings will be high. Budgets for these retrofits are not currently available. Most departments are struggling to work within current budgetary constraints and are focusing budgets on emergency maintenance. Should departments be given limits on their utility costs, they may be more open to considering resource-efficient options. The Province is exploring options with service providers who are willing to work ‘at risk’ and reclaim their costs from energy savings incurred through their services.

By implementing programmes to improve the environmental footprint of our internal operations, Provincial employees will begin to understand how they might build similar thinking into their core functions. Reducing our environmental footprint also makes good business sense in that we can operate more efficiently and we play our part in supporting various policies and strategies that we have in fact developed ourselves. By walking the talk and visibly displaying to the public what we have done to reduce our environmental impacts, we begin to raise awareness and influence change beyond our immediate operations.

4.2. Managing human resources in the Province

The Province currently employs a total of 75 013 people – this includes educators and health services staff operating in the public service. Each department has a human resource directorate which works within the Provincial and national frameworks developed by the national Department of Public Service and Administration and which reports to the Department of the Premier on specific matters – such as human resource planning, employment equity statistics, disability statistics and employee wellness. The Department of the Premier co-ordinates a Human Capital Forum where human resource managers meet to discuss impending legislation and any possible impacts on departments.

4.2.1. Employment equity: Gender issues remain a concern

The Province has a Provincial Employment Equity Policy that supports the Employment Equity Act and has adopted a standard formula for employment equity and affirmative action, which sets targets for each group based on the economically active population as per census data of 2001 (see Table 12). The national Department of Public Services and Administration (DPSA) has a major drive to employ 50% females at senior management level as well as 2% disabled persons by March 2009.

“MINDSETS STILL NEED TO BE CHANGED AND THE BUSINESS CASE FOR IMPLEMENTING 2WISE2WASTE ACTIONS NEEDS TO BE CLEARLY PRESENTED TO THE DIFFERENT DEPARTMENTS.”
The employment equity plans of certain departments – which outline how equal representation is to be achieved – expired in 2007 and have not yet been updated. The result is that targets within departments have not all been met. Where this has occurred, employment equity forums are being established to assist with monitoring of employment equity targets and recruitment practices. These plans also provide for the advancement of people with disabilities and women.

In the Provincial Government, 35% of the workforce is male and 65% of the workforce is female. The employment equity figures have changed very little from the 2007 figures. The proportion of males to females differs considerably across departments. The proportion of males in senior management positions (68%) is still significantly higher than that of females (32%). While this highlights the need for improvement, this is a positive change from the 2007 figures of 70% men and 30% women in senior management positions. As shown in Table 13, Black employees make up 20.55% of the workforce, Coloured employees 68.9%, Indian employees 0.86% and White employees 17.95%. Two hundred and twenty five (0.3%) disabled people are employed in the Province, which is a slight improvement on 2007, when 193 disabled people were employed. The under-representation of females, and especially disabled candidates, remains a challenge, with the latter being addressed through targeted recruitment of disabled candidates in the coming year.

The number of women in senior management is regarded as a stumbling block (see Table 14). The Province does not have a provincial forum for employment equity, but does have a transversal human capital forum, which is attended by all human resource directors and includes issues of employment equity. We offer an Advanced Management Development Programme, targeted to females and certain men from previously disadvantaged groups.

### 4.2.2. Addressing high levels of staff vacancies

The staff vacancy rates in the Province (averaging 25%) are uniformly high, ranging from 38% in the Department of Health to 11% in the Department of Agriculture. The figures for the Department of Health are not surprising, given the national skills shortage in the health services sector.

What the average vacancy rate means in practice is that either a quarter (on average) of the Province services cannot be provided or that each person is filling the role of 1.3 people (on average). This does not take into consideration that it takes considerable time to bring new employees up to speed. In addition to this, our recruitment processes are slow. Clearly the situation is not sustainable, as it either leads to under-delivery of planned services or to overworked staff. While departmental vacancies can be filled through outsourcing, this leads to higher costs and a less efficient spending of taxpayers money.

Assessing the vacancy rates across the salary levels reveals that the majority of vacancies are in the salary levels relating to skilled and highly skilled employees. Vacancy rates for lower-skilled (5.3%–7.4%) and senior management (0%–0.3%) positions are relatively low.

The challenges to retaining talent are multi pronged. Salaries are regarded as a significant issue, but are more of an issue in certain professions. With the availability of skills currently at a premium, certain
Figure 19. Vacancy rate by Provincial department

Figure 19. Vacancy rate by Provincial department

4.2.3. Implementing employee wellness programmes

All departments are required to produce details of their health and wellness programmes in their annual reports and provide progress updates on a six-monthly basis for presentation at the Bargaining Council. These include details on whether the department has staff dedicated to employee wellness, employee assistance programmes are in place, employment policies and practices have been reviewed for anti-discrimination against HIV status, the department has implemented measures to protect HIV positive staff members, voluntary counselling and testing (VCT) is encouraged and the impacts of its health promotion programmes are monitored.

4.2.4. Skills development

Our skills development and career development activities are based on policies from the national Department of Public Service and Administration. The Provincial Training Academy performs a needs analysis / skills audit through the departmental training committees on a regular basis. Training needs are further identified through the performance
management process, and through the use of personal development plans and through quarterly performance appraisals.

While we recognise the need to provide training for the purposes of career development, our training tends to focus primarily on enabling employees to perform optimally in their current jobs. We need to ensure that an employee is gainfully employed, and that we are using the taxpayer’s money responsibly, and that means ensuring that employees do their jobs well.

Following the identification of skills required, we typically provide courses to staff in the following areas:

- training linked to the staff member’s core function – such as technical skills and project management;
- ‘soft skills’ – such as team working and conflict resolution; and
- leadership and management courses.

Certain elements of training are provided through the training academy at Kromme Rhee, using a number of mediums such as interactive classroom based training, presentations, course manuals, group and individual exercises, workplace shadowing, and work-related assignments. Certain courses need to be sourced from outside of the training academy, particularly where they are of a more technical and job-specific nature.

Evaluations are undertaken at the end of every learning programme and are fed into our training cycle. We are currently developing an impact assessment tool to measure the impact of our training on service delivery throughout the province.

### 4.2.5. Union membership

Ninety seven per cent of the Provincial work force is represented by 17 different unions or educational associations. We regularly engage with these bodies through a provincial chamber of the General Public Service Sectoral Bargaining Council – only public service employees – and the Co-ordinating Chamber of the Public Service Bargaining council for the Western Cape Province – all public service employees and educators. These chambers deal with provincial matters and the national chambers deal with issues such as salaries.

### CASE STUDY

#### Anti-corruption and Fraud Awareness Day

There is an anti-corruption policy at a provincial level and each department has developed and implemented its own anti-corruption programme. A Fraud Awareness Day was held by the Department of Economic Development and Tourism in March 2008. The purpose of the event was to increase awareness of fraud in the workplace and to help develop a culture of fraud prevention and detection, thereby reducing the impact of potential fraud and other commercial crimes.

The Fraud Awareness campaign started two weeks prior to the actual event, with the theme of ‘Washing your Dirty Laundry’. Speakers included experts in the field of fraud investigation as well as an ex-offender, who shared her experiences with the guests to illuminate the consequences of committing fraud.
CHAPTER 5
The road ahead

While many of our sustainability initiatives are currently being driven by the Department, the Department currently lacks the full mandate to implement this agenda across the Province and suffers capacity and budgetary constraints.

While the journey ahead in improving our sustainability may begin by managing the impacts of our strategies and operations, for real and long-term change, we will need to foster a culture of innovation – radically rethinking the way we do business and identifying how we can positively influence the same scale of change beyond our own operations. We have to strive to decouple future economic growth and improved living conditions from increased resource use.

At the beginning of the report we outlined the key challenges to implementing sustainability. Following below are some proposals as to how we may overcome these challenges.

Assigning clear accountabilities for implementing and co-ordinating sustainability across all Provincial departments and local government bodies (refer to section 3.5 for detail)

As discussed in section 3.5, while the implementation of sustainability should be the responsibility of all departments, it is proposed that we establish a Sustainability Working Committee to lead and co-ordinate the efforts of other departments. While many of our sustainability initiatives are currently being driven by the Department, the department currently lacks the full mandate to implement this agenda across the Province and suffers capacity and budgetary constraints that impede the ability to scale up sustainability-related pilot projects. Given this and
the cross departmental function that the Office of the Premier fulfils, we are exploring the option of this committee being led by the Office of the Premier.

The current sustainability reporting gaps – as measured, for example, against the Global Reporting Initiative (GRI) – are significant. We will use the GRI, the input of both internal and external stakeholders, and our internal risk management processes, to guide our approach to sustainability and to establish systems for measuring our progress in this regard. To support departments with implementing sustainability, we will need to develop clear guiding principles linked to measurable objectives as part of these systems. We will need to clarify that departments’ functions will be measured against all principles of sustainability, not just select principles. These principles will need to feed into a performance framework, which will ideally be included within our Annual Performance Plans. This will enable us to track the progress of each department with regards to implementing all elements of sustainability and to provide support where required. While this report has followed the lead of the issues focused on by the iKapa GDS, a next step will be to identify which of these issues are our most material sustainability-related issues. This will involve further stakeholder engagement – with this report as part of that process.

Sustainability indicators will also be included in the Provincial Monitoring and Evaluation Programme, which tracks data trends and assesses whether certain indicators are improving or deteriorating. We recognise that we need to identify and address potential conflicts between the sustainability elements within the various Provincial strategies and policies. It is suggested that we establish a task team to take this forward, whose role would include guidance regarding the integration of sustainability principles for future policy and strategy development.

Additionally, in line with the Constitution, as a Provincial government we are responsible for monitoring and supporting the implementation of sustainability by all municipalities within the province. The performance framework and policy and strategy review discussed above would be used to support and monitor municipalities’ mainstreaming of sustainability in their strategies and operations. The sustainability performance of municipalities should be included in further Provincial sustainable development reports. Further detail on how this is proposed to be achieved is outlined in section 3.5.

Changing the mindset that regards sustainability as additional work, rather than being the basis of how we do our work

The principles of sustainability are still viewed by many as an add-on ‘project’ to the core functions of the Province. The notion of sustainability relating to how we do our work, as opposed to simply what work we do, has not yet been sufficiently ingrained in our culture.

Besides pursuing the individual programmes that are developing in each department, it is vital that we undertake an imaginative education programme amongst all our staff to build a fundamental understanding of, and agreement about, what sustainable development means in practice. If there is universal understanding of the issues facing us, leadership in driving the agenda will meet with a ready response from our people. Part of sustainability means building programmes that will last not just weeks, but years. This will only be possible if sustainability thinking becomes part of our culture.

A key component to ingraining sustainability in our culture is to assign accountability for sustainability. This is addressed further below.

Our internal education efforts should be matched with efforts to build greater understanding of sustainable development in society. Programmes in schools and actively involving the public in early stages of planning are possibilities that should be examined.

Removing the silo-mindset that permeates many of our departments

It is recognised in the iKapa GDS that to facilitate a government pursuing shared growth and integrated development, we have to work in a coherent, collaborative
and focused manner. This approach has already begun to change the way that Provincial departments work and leads the way in illustrating how sustainability can be mainstreamed into the work that we do. Departments need to be sensitised to the fact that their work should address all elements of sustainability and should not conflict with the sustainability objectives of other departments. This can only be achieved through collaborative working.

The agenda of sustainable development has not been driven forward in the Province in a co-ordinated manner. While the Sustainable Development Implementation Plan has suggested a means of collaborative working in order to mainstream sustainability across the Province, this plan is still in its infancy. A coherent strategy, framework and management approach for mainstreaming sustainability in the Province still needs to be established. Reporting on projects and deliverables will be required from the budgeting stage through to the monitoring and evaluation stage.

Understanding and putting into practice how we can uplift the quality of life of the poor within the province’s ecological limits

In expanding housing and service delivery and providing other infrastructure that is necessary to social development, it is critical that we do so in a manner that manages the associated climate and environmental impacts. To address this, we recognise the need to assess the life cycle costs of building in a more resource efficient manner. Opportunities for doing so include, for example, ensuring that housing is provided closer to work opportunities, providing ceilings and insulation in new homes, and tapping into Clean Development Mechanism projects and other sources of funding to reduce potentially higher up-front costs.

We have to think ahead. At present, neither we nor any South African business that we know of has made a commitment to being carbon neutral in its operations. Yet sustainability demands that we do so. How will we meet this challenge? Should we promote the implementation of a carbon tax and if so, how might this affect our businesses and residents?

We cannot do what needs to be done alone. Nor can we do it without public support. We must work to ensure that the public gets a much better understanding that what is at stake is the quality of their lives, and that to protect their quality of life, dramatic steps need to be taken.

Addressing capacity constraints across all departments

Staff retention strategies at the Province are currently being reviewed. We will, however, need to address this issue in creative ways, for example, developing further guidance materials and creating and implementing mentorship programmes.

JIPSA has identified categories of staff that are regarded as being crucial or in short supply. These include, for example, town and regional planners. JIPSA is working towards improving conditions of service for these critical supply professions.

Ensuring sufficient resources (financial, human and technical) for embedding sustainability throughout the Province

We recognise that the embedding of sustainability in our work will take time and resources. All our staff will need to be trained, performance systems adjusted, reviews of policies undertaken and guidance material and continuous support provided.

According to the national government’s Long Term Mitigation Scenario (LTMS), “The economic case for action (on climate change) is compelling. The costs of emission reduction are high, but the costs of inaction will be far higher, because climate impacts require large-scale adaptation.” Applying this thinking, we need to revise our accounting systems to improve our assessment of costs to natural capital and to allow for life cycle costing to be used in decision-making. Our big challenge is to make sustainability a priority of the Provincial Government. We cannot afford to keep going on the path of each department focusing on their own priorities at the expense of sustainability and of developing small scale pilot projects that are not then rolled out across the province. For example, to really address the energy crisis, we need to take a bolder approach, developing policies that legislate the installation of solar water heaters on all new homes and actively driving the development of renewable energy and energy efficient technologies. The time has come for us to drive the sustainability agenda forward more effectively – to implement sustainability in an integrated manner.
The review of this report represents a view that is not a reflection of the view of the WWF-SA, but my personal opinion. The review was conducted on the basis of the material provided and no other documents were studied. The impressions gained and concluded are based on the reviewer’s professional experience in the field. The commentary provided is not an attempt to provide an exhaustive commentary but aims merely to highlight those issues of strategic importance to the Western Cape.

The report provides a very comprehensive overview of the policies and strategies in place to make the Western Cape a more sustainable province. This work should certainly be commended. The approach of using a footprint methodology for assessing the province’s sustainability performance is a welcome tool as it provides a more transparent way to assess the province’s impact. It dramatizes the impact by the use of an internationally recognised and well-known consumption metric. It is noted that the province has a significant impact and much higher than the world and South African average. This is one of the biggest challenges that the Province faces over the next few years.

This must be measured against the ongoing challenge to improve the welfare of the province’s poor while at the same time trying to reduce the province’s ecological footprint. This can be done, but requires a new way of doing things.

The Province is involved in a plethora of issues that impose an onerous task upon the provincial government to achieve success in a realistic and timely fashion on its own ‘triple-bottom-line’. While the numerous policy and strategy initiatives are laudable, it is important to focus on those that have the benefit of being strategically important, deliver multiple impacts and catalyse wider change. There are just too many to suggest that all of them can be funded or the Province has the capacity to achieve solely on its own. It must choose those that are clear winners.

For example, a strategy to target the decarbonisation of the province would impact multiple sectors: energy, transport, industry, farming, procurement policy for goods and services, residential and commercial space. Doing less for more is perhaps a better way to put across what is implied here.

It is hard to read which of the target areas being identified are having the most impact – by this I mean geographic area and sectors. Since the targets are too generic, spatial and temporal impacts of different interventions are hard to determine. In the next round of review it will be best to identify very clear “impact outcomes” by using a targeted intervention to leverage the maximum amount of change within the most affordable and limited time-span possible.

These “impact outcomes” should be developed for specific sectors or on a geographic basis. For instance some pilot initiatives to undertake multiple sustainability objectives can be designed through spatial instruments such as a low carbon zone. Low carbon zones are being piloted in some parts of the world. Their benefit is that a single target issue can generate multiple sustainability benefits. The province should establish a flagship initiative that over the long-term helps make it a low carbon economy province. The Western Cape has all the policy, economic and environmental resource settings to make it an ideal location to test a low carbon economy strategy and be a model province.

There should also be more frank reporting about what has been achieved and what has not. In the report it was not clear how the Province monitors progress with regard to its various policies and strategies. There should be regular and timely reporting on success and disappointments so as to add to the realism of the various interventions being proposed. The impression can be given that everything is simply smooth sailing.

Finally, the report lacks a clear statement on how the government’s programme involves civic organisations; here I mean both private companies and non-profit organisations to help drive change and achieve sustainability targets.

There is also no clear indication of how the provincial government ensures accountability and high standards of governance around sustainability performance. Government should lead in some areas and in other areas business and other civic organisations are better suited to lead. None of the sustainability issues can be dealt with in isolation but require co-operation and accountability from all parties involved.
ENDNOTES AND REFERENCES

1 www.globalreporting.org
2 StatsSA Community Survey, 2007
4 iKapa Eihihlomzayo. Western Cape Growth and Development Strategy (iKapa GDS), 2008, Provincial Government of the Western Cape.
5 www.capegateway.gov.za
6 This is derived from work developed by the Future and Incite Sustainability.
8 www.millenniumassessment.org/en/index.aspx
11 The Ecological Footprint concept was pioneered in 1992 by Mathis Wackernagel and William Rees at the University of British Columbia.
12 The EF is essentially a ‘snapshot’ estimate of biocapacity demand and supply based on data from a single year. The Footprint Network calculates National Footprints for all countries based on international data sets published by the Food and Agriculture Organization of the United Nations (FAO), the International Energy Agency (IEA), the UN Statistics Division (UN Commodity Trade Statistics Database – UN Comtrade), and the Intergovernmental Panel on Climate Change (IPCC). For this work, the latest National Footprint Accounts have been purchased under license from the Footprint Network for South Africa. The reference year is 2003.
14 A global hectare is adjusted to represent the average yield of bioproductive areas on Earth.
19 Each group holds approximately 10% of the provincial population, or 570,000 people. Note the very steep increases in consumption footprints for the three wealthiest sections of the population. ‘Planets needed’ is calculated as decile group consumption divided by the global biocapacity of 1.82 gha/capita. ‘South Africa needed’ is calculated as decile group consumption divided by the South African biocapacity of 2.03 gha/capita. The income deciles used in Table 5 are those for South Africa. While the Western Cape does not have the same income distribution profile, the table does provide an indication of the ecological footprint for people living in the Western Cape per income bracket.
21 The Human Development Index is calculated as a function of life expectancy at birth, adult literacy, gross educational enrolment, education attainment, GDP per capita and life expectancy.
23 This is largely a combination of a necessarily smaller footprint due to US-imposed sanctions, and a particular focus on certain social issues by the State.
24 As one example, the percentage of the province’s population having senior certificate increased from 13.2% to 20.4% from 1995 to 2002.
25 The issues addressed under Objective 4 differ slightly from the thematic areas of the SDIP: the SDIP themes of Sustainable Transport and Human Settlements are addressed under Objectives 8 and 3 respectively. Climate Change has been included as a distinct issue (separate from Sustainable Energy); and Coastal Management has been separated from Ecosystem Services Management and Biodiversity.
26 Western Cape Education Department, 2006: 34
28 Stats SA, 2007
29 Department of Economic Development and Tourism Annual Report 2007/2008
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33 Department of Economic Development and Tourism Annual Report 2007/2008
34 Department of Economic Development and Tourism Annual Report 2007/2008
36 Quantec, 2008, Quantaic Database, Wegg, Cape Town.
37 Quantec, 2008, Quantaic Database, Wegg, Cape Town.
40 Emerging Farmer Database, 2007, GIS-enabled database of the Western Cape Department of Agriculture, Elsiesburg.
41 Information is based on a sanitation study performed in 2006, Department of Local Government and Housing.
47 iKapa GDS, 2008.
49, 50, 51, 52 iKapa GDS, 2008
54 iKapa GDS, 2008
55 As noted earlier, these issues differ slightly from the thematic areas of the SDIP: the SDIP themes of Sustainable Transport and Human Settlements are addressed under Objectives 8 and 3 respectively; Climate Change has been included as a distinct issue (separate from Sustainable Energy); and Coastal Management has been separated from Ecosystem Services Management and Biodiversity.
56 Agricultural Disaster Management Unit
57 Further information on the Sustainable Energy Strategy and links to relevant research and policy documents on renewable energy and energy efficiency can be found on www.wcapeenergy.net
58 The percentages of fuel type usage do not include nuclear. The nuclear power produced at Koeberg is fed into the national grid and it is therefore not possible to report on the percentage from nuclear sources.
59 Further information on the Khanya project can be found on: www.khanya.co.za
60 Department of Environmental Affairs & Development Planning. A Status Due, Vulnerability and Adaptation Assessment of the Physical and Socio-Economic Effects of Climate Change in the Western Cape, June 2005.
61 Department of Environmental Affairs & Development Planning. A Status Due, Vulnerability and Adaptation Assessment of the Physical and Socio-Economic Effects of Climate Change in the Western Cape, June 2005.
65 Information contained in a brief survey conducted by the Department of the Premier, as well as a study commissioned by DMAT, conducted by PricewaterhouseCoopers in 2007.
67 www.capetownpartnership.co.za
68 Western Cape Provincial Spatial Development Framework, 2005.
69 A serial heritage site is one comprising a number of discrete elements – the Cape Floristic Kingdom World Heritage comprises eight discrete nature reserves – see http://nhfcs.unesco.org/en/ut/10077
71 See www.capesact.org.za
74 Which will feed into the Provincial-wide Monitoring and Evaluation System for the iKapa Growth and Development Strategy.
76 Detailed statistics with regards to human resources in the province are published in each department’s annual report.
77 This is based on the economically active demographic profile of the Western Cape as supplied by Statistics South Africa [Stats SA] [year 2001 – census]
78 As at December 2008